

1993

The Relationship of Conversational Sensitivity and Employment Interview Experience to Deception Detection in Employment Interviews.

Karen Anding Fontenot

Louisiana State University and Agricultural & Mechanical College

Follow this and additional works at: https://digitalcommons.lsu.edu/gradschool_disstheses

Recommended Citation

Fontenot, Karen Anding, "The Relationship of Conversational Sensitivity and Employment Interview Experience to Deception Detection in Employment Interviews." (1993). *LSU Historical Dissertations and Theses*. 5631.
https://digitalcommons.lsu.edu/gradschool_disstheses/5631

This Dissertation is brought to you for free and open access by the Graduate School at LSU Digital Commons. It has been accepted for inclusion in LSU Historical Dissertations and Theses by an authorized administrator of LSU Digital Commons. For more information, please contact gradetd@lsu.edu.

INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

U·M·I

University Microfilms International
A Bell & Howell Information Company
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA
313/761-4700 800/521-0600

0001

Order Number 9419885

**The relationship of conversational sensitivity and employment
interview experience to deception detection in employment
interviews**

Fontenot, Karen Anding, Ph.D.

The Louisiana State University and Agricultural and Mechanical Col., 1993

U·M·I

300 N. Zeeb Rd.
Ann Arbor, MI 48106

THE RELATIONSHIP OF CONVERSATIONAL SENSITIVITY AND
EMPLOYMENT INTERVIEW EXPERIENCE TO DECEPTION DETECTION IN
EMPLOYMENT INTERVIEWS

A Dissertation

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

in

The Department of Speech Communications

by

Karen Anding Fontenot

B.A., Louisiana State University, 1975

M.A. in Journalism, Louisiana State University, 1978

December 1993

ACKNOWLEDGMENTS

Many people helped me with this dissertation, and I certainly owe them a debt of gratitude. Dr. Myria Allen, who directed this project, provided excellent guidance and sound advice. I am grateful to her for her direction and for her friendship. Needless to say, her influence was only beneficial, and any errors are my own.

I am especially indebted to my mother, Pat Anding, for her support, both emotional and practical, her concern, and her interest. She has never stopped believing in me. She and my father gave unending love and support.

My son John Michael is an eternal source of delight and encouragement. He cheerfully gave up many afternoons, evenings, and weekends. My stepson Joel gave me many hours of his technical advice, and saved me countless hours by being the computer whiz that he is.

Last, but certainly never least, I want to thank my husband Michael for being the wonderful husband and friend that he is. He has always been there for me. This dissertation could not have been written without Mike's help and encouragement.

TABLE OF CONTENTS

ACKNOWLEDGMENTS	ii
LIST OF TABLES	iv
ABSTRACT	vi
CHAPTER I: THE RELATIONSHIP OF CONVERSATIONAL SENSITIVITY AND EMPLOYMENT INTERVIEW EXPERIENCE TO DECEPTION DETECTION IN EMPLOYMENT INTERVIEWS	1
CHAPTER II: REVIEW OF LITERATURE CONCERNING DECEPTION, DECEPTION DETECTION, CONVERSATIONAL SENSITIVITY, EMPLOYMENT INTERVIEW EXPERIENCE, AND EMPLOYMENT INTERVIEWS	12
Deception Literature Review	12
Deception Detection Literature Review	22
Conversational Sensitivity Literature Review	38
Employment Interview Literature Review	44
Interview Experience Literature Review	50
Rationale and Research Questions	54
CHAPTER III: METHODS AND PROCEDURES	59
Procedure	61
Data Collection Instruments	73
Data Analysis	77
CHAPTER IV: RESULTS	81
Factor Analysis of the Conversational Sensitivity Scale	81
Results of Analysis for Question One	82
Results of Analysis for Question Two	99
Analysis of Deception Detection Cues	111
CHAPTER V: DISCUSSION	118
Research Findings and Implications	118
Limitations of the Present Study	128
Suggestions for Future Research	133
REFERENCES	143
APPENDIX A: QUESTIONS USED IN THE DECEPTION DETECTION INTERVIEWS	163
APPENDIX B: QUESTIONNAIRE GIVEN TO SUBJECTS	167
VITA	173

LIST OF TABLES

Table	Page
1. Factor Analysis of Conversational Sensitivity Scale	83
2. Correlation Matrix for Dependent and Independent Variables-- Overall Mean	86
3. Correlation Matrix for Dependent and Independent Variables-- Students	87
4. Correlation Matrix for Dependent and Independent Variables-- Professionals	88
5. Correlation Matrix for Dependent and Independent Variables--Males	89
6. Correlation Matrix for Dependent and Independent Variables--Females	90
7. Correlations Between Deception Detection Conversational Sensitivity	92
8. Forward Regression Model of Deception Detection and Conversational Sensitivity--Overall	93
9. Forward Regression Model of Deception Detection and Conversational Sensitivity--Students	94
10. Forward Regression Model Deception Detection and Conversational Sensitivity--Professionals	95
11. Forward Regression Model of Deception Detection with Conversational Sensitivity--Males	96
12. Forward Regression Model of Deception Detection and Conversational Sensitivity--Females	97
13. Correlations Between Conversational Sensitivity Dimensions and Detecting Spontaneous and Rehearsed Lies--Students	100

14. Correlations Between Conversational Sensitivity Dimensions and Detecting Spontaneous and Rehearsed Lies--Professionals	101
15. Correlations Between Conversational Sensitivity Dimensions and Detecting Spontaneous and Rehearsed Lies--Males	102
16. Correlations Between Conversational Sensitivity Dimensions and Detecting Spontaneous and Rehearsed Lies for--Females	103
17. Correlations Between Deception Detection and Experience	105
18. Forward Regression Model of Deception Detection and Experience--Overall	107
19. Forward Regression Model of Deception Detection and Experience--Students	109
20. Forward Regression Model of Deception Detection and Experience--Professionals	110
21. Forward Regression Model of Deception Detection and Experience--Males	112
22. Forward Regression Model of Deception Detection and Experience--Females	113
23. Frequency of Use of Four Deception Detection Cues by Professionals and Students	116
24. Frequency of Use of Four Deception Detection Cues by Males and Females	117

ABSTRACT

The purpose of this study was to examine the relationship between conversational sensitivity and employment interview experience to deception detection in employment interviews. Conversational sensitivity refers to one's ability to detect and decode the verbal, paralinguistic, and nonverbal cues that occur in conversations. Two research questions were asked:

1. Is conversational sensitivity related to deception detection in employment interviews?
2. Is employment interview experience related to deception detection in employment interviews?

A sample of 230 subjects (150 students and 80 professionals) participated in the study, which had two phases. In phase one, subjects completed the Conversational Sensitivity Scale, a 36-item, Likert-like measure that examines eight dimensions of conversational sensitivity.

In phase two, the subjects viewed a videotape of two simulated employment interviews in which the interviewees (one male, one female) responded with a mixture of truthful and deceptive statements. While they watched the interviews, they judged the veracity of the statements. The number of statements that they judged correctly was the dependent variable (accuracy)

in the study. The two independent variables were subject's score on the Conversational Sensitivity Scale (conversational sensitivity) and the number of employment interviews the subjects conducted in one year (employment interview experience).

Data was analyzed using Pearson's r , t -tests, chi-square, and multiple regression analysis. Results of the study indicated that conversational sensitivity was not related to overall deception detection. However, when the deception was categorized as either spontaneous or rehearsed deception, there was a positive correlation with the females' ability to detect spontaneous lies.

Conversational alternatives was positively correlated with females' ability to detect truthful statements, and detecting meanings was positively correlated with females' ability to detect truthful statements and spontaneous deception.

Employment interview experience was negatively correlated with deception detection.

Males were significantly more accurate than females at detecting deception, and students were significantly more accurate at deception detection than professionals. Finally, males and females use different cues in their veracity judgements.

CHAPTER I

THE RELATIONSHIP OF CONVERSATIONAL SENSITIVITY AND EMPLOYMENT INTERVIEW EXPERIENCE TO DECEPTION DETECTION IN EMPLOYMENT INTERVIEWS

Society depends upon the assumption of veracity in information exchange (Buller & Burgoon, 1993; Goffman, 1959; Knapp & Comadena, 1979). "Trust in some degree of veracity functions as a foundation of relations among human beings; when this trust shatters or wears away, institutions collapse" (Bok, 1978, p. 31). Communication relies upon the rule of veracity (Ehninger, 1977), and veracity is one of the conversational maxims included in Grice's (1989) theory of conversational implicature. It would be difficult, if not impossible, to try to negotiate meaning unless this assumption of veracity existed. Questions asked, answers given, information exchanged--all would be worthless.

As important as veracity is, there often are occasions when people try to deceive their communicative partners. In fact, deception plays such a dominant role in communication that questions surrounding lying and deception are central to understanding and explaining the nature of effective

communication (Knapp, Cody, & Reardon, 1987). One of these questions concerns deception detection, the focus of this study.

The first task in discussing deception detection is to define deception. Although a variety of different definitions exist, this study uses Buller and Burgoon's (1993) definition of deception as "the intent to deceive a target by controlling information (e.g. transmitting verbal and nonverbal messages and/or manipulating situational cues) to alter the target's beliefs or understanding in a way which the deceiver knows is false" (p. 3). This definition is the most viable because it acknowledges that the transmission of false verbal information is not necessary for deception to occur. Communicators can and do create a false belief in a target's mind by transmitting ambiguous or vague messages, omitting information from truthful messages, varying the intensity of truthful information through exaggeration and minimization, and manipulating environmental cues to create deceptive frames (Buller & Burgoon, 1993). This definition also rules out self-deceptions, intentionally transparent lies (such as jokes), and mistaken lies (such as unknowingly providing false information). These are excluded because self-deceptions are non-communicative;

intentionally transparent lies are not expected to result in target misunderstanding; and mistaken lies do not arise from an intent to deceive (Buller & Burgoon, 1993). Even with these exceptions, deception is a very frequent occurrence.

Deception is ubiquitous in interpersonal, group, and organizational relationships (Bok, 1983; Knapp et al., 1987; Knapp & Comadena, 1979; Knapp, Hart, & Dennis, 1974; Logue, 1981; Metts & Chronis, 1986; Perry & Barney, 1981; Stanbeck & Pearce, 1981; Steele, 1975; Stewart, 1980). This is because the social incentives to deceive are powerful, but the controls are often weak (Bok, 1978). Estimates indicate that the typical person lies 13 times a week (Hample, 1980). In one study, 75 subjects recorded all instances of interpersonal deception over a three-week period, resulting in 940 reported cases of lying (Lippard, 1988). Turner, Edgely, and Olmstead (1975) found that about 62% of their subjects' natural conversations involved some form of deception, and Camden and associates' (1984) subjects reported averaging 16 lies over a two-week period.

Regardless of the frequency of deception and the type of relationship in which it occurs, the perception and effect of the deception depends upon whether or not

one is the deceiver or the deceived. Deception usually harms the deceived (Bok, 1978), but it often provides positive consequences for the deceiver (Ekman, 1985; Turner et al., 1975; Wolk & Henley, 1970; Zuckerman, DePaulo, & Rosenthal, 1986). Therefore, it is equally important for communicators to be able to deceive and to detect deception.

Many people find that the ability to deceive others is an indispensable strategy for developing and maintaining satisfying social relationships and creating and maintaining a desired image (Buller & Burgoon, 1993). Lies are most frequently motivated by a desire to benefit oneself; selfishly motivated lies outnumber all others by about two to one (Hample, 1980). Turner and associates (1975) reported a set of exploitation motives for deception including establishing, maximizing, and maintaining power or influence over a target. Other researchers have described how deception is used to acquire and protect resources (Buller & Burgoon, 1993; Camden et al., 1984; Metts & Chronis, 1986). For example, deception is common in business settings, and the ability to lie undetected is recognized as a trait associated with success in business negotiations (Thorne, 1992).

Even though deception may be strategic and useful for the deceiver, its effect on others can be potentially harmful. Deceivers often lie to achieve certain goals, but these goals may be obtained at the expense of the deceived, who is in some situations rendered powerless by the lie (Bok, 1978; Buller & Burgoon, 1993). Philosophers have long recognized this negative effect on the deceived. In Dante's Inferno, deceivers are tormented in the eighth circle of Hell, lowest circle of all except for that inhabited by traitors. This severe treatment is warranted, according to Dante, because deceit and violence are the two forms of deliberate assault on human beings. Both can coerce people into acting against their will (Dante, 1940).

The negative effects of deception are not limited to individuals, but often extend into organizations (Bok, 1978). Lies in organizations frequently are dysfunctional, causing an institution to avoid difficult issues and problems and to compromise its ability to adapt to a changing environment based on accurate information (Perry & Barney, 1981). Meaning distortions in conflict and negotiation situations may negatively influence final settlements and may

exacerbate conflicts (Jablin, 1987; Lewis & Pruitt, 1971; Pruitt & Lewis, 1975).

People do not want to be deceived. Even those people who believe that they are behaving strategically when they lie, and say they are lying for the good of the other partner, report that they want others to be honest with them (Bok, 1978). For example, most executives recognize the strategic value of being successful deceivers, but report that they would prefer to work in an environment that encourages truthful behavior in others (Thorne, 1992). Because deception frequently benefits the deceiver at the expense of the target of the deception, targets have a strong incentive to be able to detect deception. Deception frequently is employed as a coercive or exploitative act, in which case the ability to detect deception can be viewed as a self-defense mechanism, a way of assuring that one is not coerced or exploited. If the ability to deceive is viewed as a strategic skill, then the ability to detect this deception can be viewed as an essential skill. Deception and deception detection always have been necessary elements in human communication. The ability to deceive has evolutionary origins and has been essential for human survival (Bond & Robinson, 1988; Kraut, 1980). The ability to detect

deception also is an adaptive and evolutionary communication skill. Researchers have contended that the ability to deceive is a strategic, valuable, and necessary part of one's repertoire of communication skills. They also have identified the ability to detect deception as an equally strategic and valuable response to deception (Kraut, 1980). Thus, evolution leads to an equilibrium in which people are skilled simulators and social actors and also are talented at piercing others' deceptions, with individual variation in both skills (Kraut, 1980). It is these individual variations that are of interest in this study.

Because the ability to detect deception is important, researchers have attempted to isolate the factors which significantly improve this ability. They have investigated the degree to which age (Feldman & White, 1980), self-monitoring ability (Brandt, Miller, & Hocking, 1980a; Geizer, Rarick, & Soldow, 1977), social skills (Riggio, Tucker, & Throckmorton, 1987), physical attractiveness (DePaulo, Stone, & Tang, 1987), attentional determinants (DePaulo, Lassiter, & Stone, 1982), familiarity (Brandt et al., 1980b, 1982), ethnic background (Seiter, Wiseman, Madrid, Gass, & Riggio, 1990), general work experience (Ekman & O'Sullivan, 1991; Zuckerman, Koestner, & Alton, 1984; Zuckerman,

Koestner, & Colella, 1985), religious commitment (Maier & Lavrakas, 1976), and gender (Comadena, 1982; deTurck, 1991; McCornack & Parks, 1990; Rosenthal & DePaulo, 1979) affect one's ability to detect deception. This study is interested in two individual characteristics, conversational sensitivity and employment interview experience, and their relationship to deception detection in employment interviews. The relationship between these two characteristics and deception detection has not been examined previously, and there are several reasons to expect that such a relationship exists.

Conversational sensitivity refers to one's ability to detect and decode the verbal, nonverbal, and paralinguistic cues that occur in conversations. There are several reasons to believe there may be a linkage between conversational sensitivity and the ability to detect deception. These include a theoretical connection between the two concepts and characteristics which the two have in common.

First, there is a theoretical connection between conversational sensitivity and deception detection because they have both been identified as social affordances (Daly, Vangelisti, & Daughton, 1987; Knapp et al., 1987; Kraut, 1980). Social affordance theory

states that different species have developed perceptual systems that can "pick up" information from the environment which is of particular importance to their survival (Gibson, 1979).

Second, several recent studies demonstrated that people can detect deception by observing and accurately interpreting certain verbal and nonverbal cues that occur in conversation (deTurck, 1991; deTurck, Harszlake, Bodhorn, & Texter, 1990; deTurck & Miller, 1990). The ability to observe and accurately interpret conversational cues is a basic component of conversational sensitivity.

A third tentative reason to believe there may be a connection is that both conversational sensitivity and deception detection are correlated positively with self-monitoring ability (Buller & Burgoon, 1993; Daly et al., 1987; DePaulo, Zuckerman, & Rosenthal, 1980; Geizer et al., 1977).

This study also explores the role of interview experience in detecting deception during employment interviews. The evidence that experience and practice can improve deception detection has been mixed. Some researchers found that experience had no effect on deception detection (DePaulo & Pfeifer, 1986; Hendershot & Hess, 1982; Kraut & Poe, 1980). However,

several recent studies showed that experience improved deception detection ability when the experience was very specific to the particular deceptive situation (DePaulo et al., 1987; Ekman & O'Sullivan, 1991; Zuckerman et al., 1984).

This study examines a very specific kind of experience, employment interviewing. The employment interview was chosen for examination because research suggests that deception is commonly used in employment interviews (Hample, 1980; Martin & Nagao, 1989; Stewart & Cash, 1978; Watson & Ragsdale, 1981), and because of the negative consequences associated with deception within this communicative setting. Deception which goes undetected in job interviews can result in a poor "fit" between the interviewee and the organization or in the selection of unqualified personnel. In addition, turnover rates are much higher in organizations where deception has occurred during interviews (Freedman, 1992).

In conclusion, deception is prevalent in society and is often harmful to the target of the deception. Therefore, detecting deception is an important and necessary ability for communicators, and is a subject that warrants examination. The purpose of this dissertation is to examine the influence of two

individual differences, conversational sensitivity and interview experience, on deception detection ability during employment interviews.

The dissertation has five chapters. Chapter Two reviews previous research on deception, deception detection, conversational sensitivity, interview experience, and employment interviews. It also provides an explication of the research questions tested. Chapter Three describes the methods and procedures used in testing the research questions. Chapter Four reports the results. Chapter Five discusses the findings, with an emphasis on future implications for this line of research.

CHAPTER II

REVIEW OF LITERATURE CONCERNING DECEPTION, DECEPTION DETECTION, CONVERSATIONAL SENSITIVITY, EMPLOYMENT INTERVIEW EXPERIENCE, AND EMPLOYMENT INTERVIEWS

This chapter identifies the literature and research findings that provide a foundation for exploring the relationship between conversational sensitivity, interviewing experience, and deception detection in employment interviews.

Deception Literature Review

Although the focus of this study is on deception detection, it is necessary to understand and review the deception research because it is impossible to separate deception detection from deception. People deceive for different reasons, under different situations, and with different rates of success, and all of these differences influence their targets' ability to detect deception. This review will examine two aspects of deception that are particularly related to deception detection: deception as a strategic communication choice and individual differences in deception ability.

Deception Used As Strategic Communication

Some researchers have examined deception as an evolutionary, genetic trait (e.g., Kraut, 1980; Shreeve, 1991), noting that family members, including identical twins separated at birth, appear to have a similar tendency to lie (Bond & Robinson, 1988). Kraut (1980) argues the ability to deceive has evolutionary origins because it is essential for human survival.

However, most recent work on deception has focused on deception as a strategic, rational communication choice, and it is this research that has provided a basis for much of the deception detection research. For example, Buller and Burgoon (1993) describe the Strategic Choice Model (Seibold, Cantrill, & Meyers, 1985) as useful in explaining deception. They point out that communicators choose deceptive messages by going through four distinct and deliberate steps: assessing their motives, the nature of the situation, and their relationship with the target; appraising the alternative influence messages in their communication repertoire; selecting a particular message and foregoing others; and monitoring the target's reactions in order to formulate subsequent message choices.

As strategic communication, deception is a message property that reflects a functional adaptation to the

demands of complex communication situations. A great deal of deception research has examined the different types of deceptive messages. Therefore, it is important to review this research, even though it is not the focus of this study. The foundation for thinking of deception in these terms was laid by Hopper and Bell (1984) in their development of a typology of deceptive messages. They generated six basic classifications of deceptive messages: fictions (exaggeration, myth, irony, tall tales, white lies); playings (joking, teasing, bluffing); lies (false verbal statements communicated with the intent to deceive); crimes (acts proscribed in the criminal justice system, such as cons and forgeries); masks (hypocrisy, evasion, concealment); and unlies (deception through implication). Not only are the message forms of these various deceptive acts different, but the perception of their acceptability also differs. Hopper and Bell concluded fictions and playings constitute a category of benign deceptive acts, while lies, crimes, masks, and unlies are exploitative deceptive acts.

Buller (1987) continued the research on deceptive message forms by examining the relationship between types of deceptive messages and contextual features

which influenced their design. He developed a more parsimonious categorizing system than Hopper and Bell's (1984). His categories are falsehood acts, deceit strategies, and play strategies.

A third category system developed by Metts and Chronis (1986) generated eight deception types: falsifications, half-truths, exaggeration of feelings, exaggeration of information, minimization of feelings, minimization of information, concealments (both of feelings and information), and escapes. Generally, subjects relied most heavily upon falsifications, but the type of deception strategy chosen interacted with context, such that when subjects felt that they were prompted to lie by a specific question from their interactional partner, they were more likely to choose falsification as a deception strategy than any of the other deception types. This research has a direct application to employment interview research. Interviewees often report that they are prompted to lie by the interviewer's verbal and nonverbal probes (Martin & Nagao, 1989). Therefore, interviewers often influence the type of deception that interviewees use, according to Metts & Chronis (1986).

The research concerning deception as a strategic act is important to the current study because an

employment interview generally involves strategic communication. An employment interview often involves some degree of persuasion; therefore, a discussion of deception as a persuasive strategy follows.

Several researchers have argued that deception is as strategic as persuasion (e.g., Buller, 1987; Buller & Burgoon, 1993; Miller, 1982; Neuliep & Mattson, 1990). According to Miller, deception is not just similar to persuasion--deception is inherently persuasive. He wrote, "Deception is a general persuasive strategy that aims at influencing the beliefs, attitudes, and behaviors of others by means of deliberate message distortions" (Miller, 1982, p. 99). But persuasive strategy typologies generally do not include deception, and most compliance-gaining studies do not study deception (Neuliep & Mattson, 1990).

However, Neuliep and Mattson (1990) examined deception as a persuasive strategy in their study of compliance-gaining strategies and found that during deceptive encounters two types of persuasive acts occur. On a subtle level, the actor attempts to persuade the target of his or her veracity. On a more apparent level, the actor attempts to gain the target's compliance using some form of circumvention. Thus, when actors use deception as a persuasive strategy they

simultaneously engage in two types of persuasive behaviors.

One of the most useful supports for studying deception as strategic communication can be found in McCornack's (1992) Information Manipulation Theory (IMT). IMT suggests that deceptive messages function deceptively because the information that interactants possess is manipulated within the messages they produce. Individuals possess four types of expectations regarding information transmission: expectations about the quantity (amount), quality (veracity), and relevance of information transmitted, and the clarity of manner in which the information is presented (Grice, 1989). According to IMT (McCornack, 1992), deception occurs when a speaker exploits the listener's expectations for disclosure by covertly altering the information that is disclosed in terms of amount, veracity, relevance, and clarity. Deceptive messages are deceptive because, although they deviate from the principles underlying conversational understanding, these deviations are not apparent, and listeners are misled by their belief that speakers are behaving in a cooperative manner (McCornack, 1992). Based on the research that has been discussed, the production of deceptive messages appears to be the

result of a complex process where individuals draw upon their particular beliefs about communication and situational relevance to shape messages to fit particular situations (McCornack, 1992). What then are the situations or purposes that inspire people to deceive, and what are the effects of deception when it is detected?

Motivations for Lying

People primarily lie for selfish reasons, and the majority of these lies are told to superiors such as employers, teachers, and parents (Hample, 1980). People report lying for a variety of rewards, including basic rewards, affiliation rewards, self-esteem rewards, dissonance reduction and personal satisfaction (Camden et al., 1984). Turner and his associates (1975) identified five other motivating categories: to save face, guide social interaction, avoid tension or conflict, affect interpersonal relationships, and achieve personal power. Deception also is used to regulate, constrain, or maintain the target's self-image or self-esteem, and to protect or enhance the deceiver's image in the target's eyes (Buller & Burgoon, 1993; Metts & Chronis, 1986). Most, if not all, of these reasons to deceive can be found in employment interviews.

The more important one's reason to lie, the greater the motivation is to lie successfully. Generally, interviewees in employment interviews are going to be highly motivated to succeed in their deception because they want to be hired. They also want to avoid the negative consequences of having their deception discovered. However, motivation to deceive does not necessarily insure deception success. The least detectable condition is a liar with an intermediate level of motivation (Ekman, 1985). This partly is because high motivation increases arousal and the desire not to be detected, but it also increases the cognitive burden of the deception by prompting liars to concentrate more on communication (Knapp et al., 1987). What this means is that highly motivated communicators may be able to concoct a successful verbal lie but are less successful at masking their lies due to leakage in their nonverbal behavior (Buller & Burgoon, 1993).

Another factor that influences why people lie is frequency of interaction. The more people interact with one another, the more frequently they deceive one another (Lippard, 1988). This finding may not seem relevant to the employment interview, because the interviewer and interviewee sometimes meet only once. However, many organizations encourage second and third

interviews. In such cases interaction would be more frequent, and the possibility of deception might increase. These reasons explain why people lie. What happens when their lies are discovered?

When deception is discovered, it may produce serious consequences within relationships (McCornack & Levine, 1990; Planalp & Honeycutt, 1985). The severity of the consequences depends upon the degree of relational involvement, the importance attributed to the act of lying and the information that was lied about, and the suspicion of the target (McCornack & Levine, 1990). In the case of deception in employment interviews, the consequences of deception detection might result in the loss of the prospective job or the loss of face. While this is an interesting topic of investigation, more research has explored individual differences that influence the ability to deceive.

Individual Differences in Deception Ability

Extroverted, dominant, exhibitionistic, and socially skilled people tend to be more successful at deception than introverts and highly anxious people (Mehrabian, 1972; Riggio & Friedman, 1983; Riggio et al., 1987). People with greater communication skills and self-monitoring abilities are better able to minimize leakage; increase facial animation, head

movements, verbal fluency, and eye contact; use more "we" pronouns; and present a believable lie (Cody & McLaughlin, 1990; DePaulo et al., 1985; Riggio & Friedman, 1983; Riggio, Tucker, & Widaman, 1987). Communicator style is also related to one's deceptive abilities. For example, communicators were judged to be better deceivers when they were perceived as being attentive, friendly, precise, and demonstrating a low dramatic style (O'Hair, Cody, Goss, & Krayner, 1988).

Machiavellianism is a personality trait that appears related to deception skill (Christie & Geis, 1970; Exline et al., 1970; Gies & Moon, 1981; Knapp & Comadena, 1979), although the empirical findings are mixed. For example, Exline and associates (1970) found high Mach liars maintain better eye contact during lying than low Mach liars, but Knapp and his associates (1974) found no Machiavellian differences. Research also is mixed regarding age. Some studies have shown that people become more skilled at deception as they get older (DePaulo & Rosenthal, 1979; Morency & Krauss, 1982; Zuckerman et al., 1986) while others show that this is either not the case (Feldman et al., 1978; Feldman, Jenkins, & Popoola, 1979) or it is only true for females (Feldman & White, 1980). Other gender differences in deception also exist, primarily between

rehearsed and spontaneous lies. For example, during rehearsed lies males suppressed leg/foot movement and gesturing behavior more than they did during spontaneous lies, while females did just the opposite and showed less leg/foot movement during spontaneous lies than they did during prepared lies. Furthermore, during prepared lies males illustrated less than females did (Cody & O'Hair, 1983).

Deception Detection Literature Review

Before discussing some of the variables which have been linked to the ability to detect deception, it is beneficial to discuss the accuracy rates of deception detectors. This is important because several discrepancies exist regarding accuracy rates. Many researchers argue that deception detectors are not very accurate (deTurck et al., 1990; deTurck & Miller, 1990; Ekman & O'Sullivan, 1991; Kraut, 1980; O'Hair et al., 1988; Seiter et al., 1990). However, most of these studies cite Zuckerman and associates' (1985) findings that untrained observers were only accurate in detecting deception about 50% of the time. Others have found different accuracy rates varying from a mean accuracy score of 63% for untrained observers to a mean accuracy score of 77% for trained observers (Brandt et al., 1980, 1982; DePaulo & Rosenthal, 1979; DePaulo et

al., 1980; deTurck, 1991; Maier, 1966; Maier & Thurber, 1968). Even if the lowest accuracy rate cited, 58%, is correct, this means observers are successful in detecting deception at least as often as deceivers are successful in deceiving. What, then, are some of the clues that enable an observer to detect deception?

The interest in clues used to detect deception is ancient. A papyrus dating back to 900 B.C. bears this description of a liar, "He does not answer questions, or gives evasive answers: he speaks nonsense, rubs the great toe along the ground, and shivers; he rubs the roots of his hair with his fingers" (DeVito & Hecht, 1990, p. 332). But only in the last 20 years has systematic research into deception detection been conducted (Ekman & O'Sullivan, 1991). The research has concluded that, although there is no single individual variable directly associated with deceit (Buck, 1984; Knapp et al., 1987; Zuckerman et al., 1981), there are reliable differences in the behavior of truth tellers and liars. The research has focused on examining these differences (Knapp et al., 1987; deTurck & Miller, 1985). Most of the deception detection research can be divided into four general areas: nonverbal cues to deception, verbal cues to deception, situational aspects of deception, and characteristics of the

deception detector. The primary focus of the study reported here is on the situational aspects of deception and the characteristics of the deception detector. However, respondents were asked to describe the verbal and nonverbal cues they used in detecting deception. Therefore, the research concerning these areas will be reviewed briefly, beginning with the nonverbal cues to deception.

Nonverbal Cues to Deception

The leakage hypothesis developed by Ekman and Friesen (1969, 1974) argues that individuals are able to control some, but not all, nonverbal behaviors during deception. Because interactants focus more on the face than the body, when people attempt to conceal actual feelings or to simulate feelings they disguise the face more than the body. Therefore, the body is usually a more truthful indicator to the observer of either how a person feels (leakage) or that something is amiss (deception clues). This difference between the face and the body is limited to deceptive situations. When there is no deception, there is little difference in the information provided by the face and the body.

Nonverbal behaviors commonly associated with liars compared to truthful communicators are as follows: more

hand-shrug emphasis, less nodding, more speech errors, slower speaking rate, increased self-manipulation (touching of body parts), frequent shifts in leg/body position, tense leg and foot positions, blushing, perspiring, dilated or unstable pupils, and less immediate positions relative to partners (Buller & Burgoon, 1993; Knapp, 1980; Mehrabian, 1981; Miller & Burgoon, 1982).

However, research is mixed regarding some of the nonverbal cues. Buller and Aune (1987) found deceivers gaze less overall and gaze more when targets are not looking at them, but DePaulo and her associates (1985) indicated liars did not avert their eyes any more than truth-tellers. Some researchers found that deceivers engaged in more innocuous conversational behavior such as nodding, smiling, and refraining from interrupting (DePaulo et al., 1985; Ekman, Friesen, & Scherer, 1976; Mehrabian, 1971, 1972). However, other researchers found the opposite or no differences in nodding and smiling (e.g. Bennett, 1978; Buller & Aune, 1987; Ekman & Friesen, 1974; Feldman, Devin-Sheehan, & Allen 1978; Hocking & Leathers, 1980; Kraut, 1978; Mehrabian, 1972; Zuckerman et al., 1985).

Paralinguistic cues, especially tone of voice, appear to be potentially indicative of deception.

Deceptive communicators tend to be higher pitched and more hesitant (Zuckerman et al., 1986) than truthful communicators. As people become more suspicious, they rely upon vocal cues rather than visual cues (DePaulo et al., 1982; DePaulo & Rosenthal, 1979; DePaulo et al., 1980; Scherer, 1979). It is important to note that while nonverbal cues may be accurate indicators of deception, people often use inaccurate nonverbal and verbal cues when they make veracity judgments (Stiff et al., 1990). The next area to be reviewed concerns verbal cues to deception.

Verbal Cues to Deception

Some of the verbal cues to deception include the use of fewer different words, lower confidence ratios, avoidance of factual assertions, fewer references to self-experiences, fewer references to the past, fewer "other" references, fewer group references, and more irrelevant information (Knapp et al., 1974; Todd-Mancillas & Kibler, 1979; Watson, 1981; Watson & Ragsdale, 1981; Zuckerman et al., 1981; Zuckerman & Driver, 1985). Deceivers also exhibit more speech errors and hesitations, more word repetitions, more disparaging remarks, and more negative statements (Buller & Burgoon, 1993).

Neuliep and Mattson (1990) found truthful persuaders showed more variety in their message choices, generating more promise, debt, threat, guilt, and direct-request messages types than did the deceptive persuaders. The deceptive persuaders almost exclusively chose only explanation-type messages. A consistent difference between the two groups was that the truthful group generated messages that relied heavily on strategies based on sanctions, which provide rewards for compliance and punishments for resistance, and the deceptive group used strategies based on rationale, which offer one or more reasons for compliance that are usually composed of factual statements or beliefs. Neuliep's and Mattson's research presents several interesting implications for detecting deception in employment interviews, because an employment interview is basically a persuasive situation. For example, an interviewer might be alerted to possible deception if the message types generated by the interviewee seem to be exclusively rationale rather than sanctioning strategies.

Verbal and Nonverbal Primacy in Veracity Judgments

Researchers have tried to determine the relative importance of verbal and nonverbal cues (e.g., Buller & Burgoon, 1993; deTurck & Miller, 1985; Hale & Stiff,

1990; Knapp et al., 1974; Watson & Ragsdale, 1981). Several studies found that verbal cues were more useful for detecting deception than nonverbal cues. Subjects given access to audio and facial cues were no better at detecting deceit than subjects exposed only to audio cues. However, deception was much more readily detected from any source that included words (such as transcript, audio tape, or videotape with sound) than just face and body without words (Maier & Thurber, 1968; Zuckerman et al., 1981).

Usually, the primacy of verbal or nonverbal sources depends on the extent to which these information sources agree. Verbal cues were judged more important when the verbal and nonverbal sources were in agreement and nonverbal cues were judged more important when these sources contradicted each other (Burgoon, 1984; Stiff et al., 1990; Zahn, 1973). However, researchers found that nonverbal cues were prominently used in veracity judgments regardless of cue agreement (Hale & Stiff, 1990; Hocking et al., 1979; Stiff et al., 1990). This is because observers lack the knowledge to assess verbal information and therefore rely more heavily on nonverbal cues (Stiff et al., 1990). All of the nonverbal cues associated with actual deception were found to be different from the nonverbal cues

associated with perceived deception (Zuckerman & Driver, 1985). For example, indirect eye gaze and posture shifts were associated with perceived deception, and yet these are not accurate indicators of actual deception. What these findings mean is that people depend on inaccurate nonverbal cues more than they do on accurate verbal cues.

The fact that nonverbal cues are used more than verbal cues in deception detection, even when they are inaccurate, is an important point for deception detection in employment interviews. Research shows that interviewers are influenced greatly by interviewees' nonverbal behavior (e.g., Byrd, 1979; Forbes & Jackson, 1980; Imada & Hakel, 1977; Keenan, 1976; Keenan & Wedderburn, 1975; McGovern & Tinsley, 1978; Trent, 1978). Interviewers often are instructed to observe nonverbal cues as an indicator of deception, without sufficiently being advised of the importance of verbal cues (Carney, 1986; DeMeuse, 1987; Gifford et al., 1985; Kowal, 1990; LaBarbara, 1988; Sheppard, 1986; St. John, 1985). Therefore, interviewers may be using inappropriate cues when they try to detect deception, which might affect their accuracy in detection.

The best approach in detecting deception appears to be using a combination of nonverbal and verbal cues (Ekman & O'Sullivan, 1991; Knapp, 1989). Six verbal and nonverbal cues to deception-induced arousal have been identified. These are adaptors, hand gestures, pauses, response latency, speech errors, and message duration (deTurck, 1991; deTurck et al., 1990; deTurck & Miller, 1990). When people lied, they spent less time talking, paused more when answering a question, encoded more nonfluencies (e.g., ah, er, um, you know), paused longer before answering a question, and spent more time engaging in adaptors and hand gestures. These six cues reliably differentiated deceptive communication from truthful communication, even if the nonliars were as nervous as the liars (deTurck & Miller, 1990).

As important as these cues may be in detecting deception, situational variables also are important. Situational variables are those found in a specific deceptive situation, rather than individual differences such as gender and age. These situational variables include probes by the deceiver's target, the degree of familiarity between the deceiver and the target, the timing of the lie in the conversation, whether or not the target is an observer or participant in the

conversation, and the type of lie told. These variables are the focus of the next section.

Situational Aspects of Deception Detection

Most research has taken a unidirectional approach (deceivers transmit signals which receivers passively absorb). However, four recent studies examined the role of mutual influence in deceptive conversations by investigating whether or not the target can improve deception detection by asking questions or probing for inconsistencies (Buller, Comstock, Aune, & Strzyzewski, 1989; Buller, Strzyzewski, & Comstock., 1991; McCornack & Levine, 1990; Stiff & Miller, 1986).

This line of inquiry has important implications for deception detection in employment interviews because interviewers are told that probing and asking questions will help them receive truthful answers (Kowal, 1990). However, just the opposite appears to be true. Probing did not improve deception judgments. Instead, when the target probed the deceiver, the result was an enhanced perception of deceiver truthfulness by both the target and observers. This may be because probing communicated suspicion which alerted the deceivers to manage their behavior and appear more convincing (Buller et al., 1989).

Another situational variable is familiarity with the deceiver's truthful behavior. Observers who were familiar with a communicator's repertoire of behavior during truthful communications were significantly more accurate in recognizing the same speaker's deceptive messages than those who had not previously seen the truthful behavior (Brandt et al., 1980, 1982; Hayano, 1980; Murray, 1983). This finding also has an important implication for research concerning deception in employment interview situations. If an interviewer has baseline information about an interviewee's truthful expressive pattern, the interviewer should be able to detect deceptive communication more accurately. One way to obtain this baseline information is to ask easily verifiable questions (perhaps about courses taken or grades received) and check to see if the answers are truthful.

However, the effect of familiarity may be not entirely positive. In one study, observers made judgments of a stranger's truthfulness and deceit after they had been exposed to the deceiver's truthful behavior. Judgments were made under four conditions: (a) no exposure to truthful (comparison) behavior, (b) low exposure (comparison viewed once), (c) moderate exposure (comparison viewed three times) and (d) high

exposure (comparison viewed six times). Accuracy regarding the deceiver's behavior increased with exposure, except in the high exposure condition where accuracy decreased significantly (Brandt et al., 1980). The researchers attributed this decrease in accuracy to observer fatigue and information overload, but whatever the cause, the result was that too much familiarity negatively affected deception detection.

Familiarity with the deceiver also is a disadvantage when the interactants are friends or romantic partners, because a truth-bias seems to exist. Several studies suggest that people do not want to suspect their friends or romantic partners of deception (Buller, 1987; Buller et al., 1991; deTurck & Steele, 1988; McCornack & Parks, 1986; Mongeau, 1988). However, accuracy in detecting deception can be substantially increased by arousing a moderate degree of suspicion (McCornack & Levine, 1990b). The truth-bias probably is not a significant consideration in employment interviews because most interviewers and interviewees do not know each other.

Deception detection also is affected by whether or not one is a conversational participant or an observer. Conversational participants are less accurate at detecting deception than observers because of the

cognitive and communication requirements of conversational management (Buller et al., 1991). The study reported here uses observers as deception detectors. This method was used because it is the most commonly used method for deception detection studies (Buller et al., 1991). However, it should be noted here that using observers is not the same as using actual interviewers, and this method may have implications for the internal validity of this study. This concern is discussed in greater detail in Chapter 5.

A final situational variable to be discussed is the type of lie that is told. Two different types of lies will be discussed: spontaneous and rehearsed. These two types result in different kinds of detection cues. For example, spontaneous lies require liars to create messages and transmit them off the top of their heads. They contain more pauses and nonfluencies than rehearsed lies, and they lack specific detail (Cody et al., 1984; Kraut, 1978; Knapp et al., 1987). When lies are rehearsed they exhibit shorter response latencies, engage in less postural shifting, fewer gestures, shorter answers, faster speech rates, and more pupil dilation and smiling (Greene et al., 1985; Zuckerman & Driver, 1981). These two types of lies are all lies

that might possibly occur in employment interviews. Therefore, the present study examines detection of both rehearsed lies and spontaneous lies.

The last area of the deception detection research to be reviewed examines the personal characteristics of the deception detector.

Characteristics of Deception Detectors

In the past, deception research emphasized the behavior of the liar and spent less effort examining the ability of lie detectors (Knapp et al., 1987). However, in the last 20 years research has attempted to isolate individual differences that significantly improve deception detection ability (Ekman & O'Sullivan, 1991). Some of the individual differences that are of interest to this study are self-monitoring ability, perceptiveness, and social anxiety, because they are related to conversational sensitivity. Another variable, generalized communicative suspiciousness (GCS), is an individual difference that has implications for employment interviews. These individual differences will be reviewed here. High self-monitors were found to be better at detecting deception than low self-monitors (Brandt et al., 1980; Geizer & Rarick, 1977), as were people who were high in social skills (DeVito & Hecht, 1990). Another

individual difference that is positively correlated with deception detection is generalized communicative suspiciousness (GCS) (Levine & McCornack, 1989). High GCS individuals were able to judge the veracity of messages with close to 70% accuracy (McCornack & Levine, 1990b). Two individual differences that are negatively associated with deception detection are perceptiveness and social anxiety (DePaulo et al., 1980).

There are several gender differences in deception detection. Although females have been found to be superior to males at decoding nonverbal cues in non-deceptive situations, they were less likely than males to decode the nonverbal deception leakages of others. When deception cues were being emitted, women were substantially more likely to interpret these cues as the deceiver wanted them to be interpreted. In situations where deception is occurring among nonintimate interactants, males were significantly more accurate at detecting deception than females (DePaulo et al., 1980; Rosenthal & DePaulo, 1979). However, this finding did not hold for participants in intimate relationships. In those situations, females were significantly more accurate at detecting their male partners' deception than males were at detecting the

females' deception (McCornack & Parks, 1990). Males and females used different channels during the decoding process, with females relying on the visual channel while males used vocal cues (Rosenthal & Depaulo, 1979). Females were more likely to be influenced by attentiveness and friendliness as an indication of honesty for both males and females, but males used attentiveness to judge the veracity of males and friendliness to judge the veracity of females (O'Hair et al., 1988). Males were more likely to detect female deception than deception from other males and females were more accurate at detecting male deception than they were female deception (DePaulo, Stone, & Lassiter, 1985). Finally, males benefited more from training in deception detection than did females (deTurck, 1991).

Because deception detection is an important and useful ability for communicators to possess, any research that increases knowledge about this ability is valuable. Research into individual differences of successful deception detectors is especially valuable because this information may help other people increase their ability. One individual difference that has not been examined in relationship to deception detection is conversational sensitivity. The next section will define conversational sensitivity and explain why there

are reasons to expect a relationship between it and deception detection.

Conversational Sensitivity Literature Review

Conversational sensitivity refers to one's ability to detect and decode the verbal, paralinguistic, and nonverbal cues that occur in conversations (Daly et al., 1987). This ability should enable a person to more accurately detect deception. The nature and correlates of the conversational sensitivity construct were empirically identified by Daly and his associates (1987). To date, only three other studies have focused on conversational sensitivity, and these findings will be reviewed. First, however, the theoretical grounding of conversational sensitivity will be discussed.

Conceptually the conversational sensitivity construct can be explained by applying Gibson's (1979) theory of social affordances. This theory states that different species have developed perceptual systems that can "pick up" information from the environment that is particularly relevant to their survival. Social affordances provide a connection between the organism and the environment within which that organism lives. Since humans live in a conversation-centered world, spontaneous communication, which involves

message production, reception, and interpretation, is a major social affordance (Buck, 1984).

Deception detection also is a social affordance. As has been discussed previously, deception in various forms is prevalent and in many cases it is exploitative and harmful to the target. Therefore, the ability to detect deception sometimes is necessary for survival (Bok, 1978; Kraut, 1980).

Although social affordances are important to human survival, people differ in their processing inclinations. Each person may pay attention to, anticipate, and remember different affordances of a situation (Dworkin & Goldfinger, 1985). The conversational sensitivity construct developed by Daly and his associates (1987) is designed to measure differences in conversational sensitivity.

The 36-item instrument explores eight dimensions of conversational sensitivity: detecting meanings, conversational memory, conversational alternatives, conversational imagination, conversation enjoyment, interpretation, perceiving affinity, and conversational dominance (Daly et al., 1987). Detecting meanings is the tendency to sense the purposes as well as the hidden meanings in what individuals are saying. Conversational memory is the individual's predilection

to recall previous conversations. Conversational alternatives refers to flexibility in conversing and being skilled at wording the same thought differently. Conversational imagination is the degree to which people make up conversations in their minds. Conversational enjoyment (eavesdropping) refers to the degree to which individuals enjoy listening to conversations. Interpretation is the ability to detect irony or sarcasm in what others say and the ability to paraphrase what others have said. Perceiving affinity is the ability to sense liking, attraction, or affiliation between communicators. Conversational dominance is the ability to tell who has power and control within the conversation.

These eight dimensions of conversational sensitivity help explain why conversationally sensitive people manage conversation differently than do less conversationally sensitive people. People who describe themselves as especially sensitive to conversations focus more on the structure and nature of conversations than do less sensitive individuals (Daly, et al., 1987). Because they focus more on conversations, it is possible that they notice verbal and nonverbal cues to deception more than do less sensitive people.

Conversational sensitivity can be viewed as both a personality variable and as a response to a number of contextual variables (Daly et al., 1987). As a personality trait, conversational sensitivity is positively correlated with empathy, self-esteem, perceptiveness, private self-consciousness, social skills, assertiveness, and self-monitoring (Daly et al., 1987). Two of these personality traits, self-monitoring and perceptiveness, are particularly relevant to this study of deception detection.

Perceptiveness is defined as the ability to perceive specific cues that are indicative of deception, and it may be a perceptual or attentional factor (DePaulo et al., 1982; Littlepage & Pineault, 1979).

Perceptiveness has been positively correlated to deception detection (Buck, 1984; DePaulo et al., 1980), as has self-monitoring ability (Brandt et al., 1980; Buller & Burgoon, 1993; DePaulo et al., 1980; Geizer et al., 1977). However, one study did find high self-monitors were accurate only when the liar was communicating by an intercom vs. face-to-face (DePaulo et al., 1980).

In addition, conversational sensitivity is positively related to need for intimacy and to communicating for pleasure, affection, and relaxation

(Hosman, 1991). People high in conversational sensitivity are predisposed to verbally praise others (Wigley, Pohl, & Watt, 1989). Conversational sensitivity also is closely related to imagined interaction, a mindful activity in which message rehearsal and review involve a person in imagined dialogue with others using verbal and visual imagery (Honeycutt, Zagacki, & Edwards, 1992).

Conversational sensitivity is negatively associated with communication apprehension, receiver apprehension, and social anxiety, which is the uneasiness and self-consciousness that people experience in social situations (Daly et al., 1987). People high in social anxiety have been found to be more accurate at detecting deception than those lower in social anxiety (DePaulo et al., 1980; DeVito & Hecht, 1990). In fact, DePaulo and her associates (1980) found social anxiety to be one of the three personality characteristics that showed the strongest correlation with ability at detecting lies (the other two were social participation and perceived complexity of human nature). To put the conversational sensitivity and deception detection findings in context, self-monitoring is positively correlated with both of them, but social anxiety is

positively correlated with deception detection and negatively correlated with conversational sensitivity.

Conversational sensitivity can be reconceptualized as a situational response tied, in part, to the interaction's purposes and the exchange's contextual characteristics. Sensitivity is aroused in situations where conversations focus on personal, nonsuperficial topics, violate expectations, and are unpredictable, formal, interesting, and involving. People are more sensitive when they enter conversations in a positive mood with distinctive purposes in mind, and are concerned with creating a positive impression of themselves (Daly et al., 1987).

One context that seems to include many of these variables is the setting of this study, the employment interview. Most employment interviews are formal and focus on personal and nonsuperficial topics, at least to the interviewee. Although employment interviews often have a standard format, the interactants are usually not acquainted so an element of unpredictability exists. Both the interviewee and the interviewer have distinct purposes in mind, and are concerned with creating favorable impressions. Therefore, it seems likely that enhanced conversational

sensitivity will be important for both interactants in an employment interview, the topic of the next section.

Employment Interview Literature Review

Although the employment interview's validity and reliability as a selection device repeatedly has been questioned (e.g., Ghiselli, 1966; Martin & Nagao, 1989; Mayfield, 1964; Reilly & Chao, 1982; Schmitt, 1976; Ulrich & Trumbo, 1965), it serves important organizational recruiting and public relations functions (Arvey & Campion, 1982; Jablin, 1987). Because of its importance, researchers have been studying the employment interview for more than 60 years (Arvey & Campion, 1982) in an effort to discover the variables which influence judgments made during the interview. The following section discusses communication variables and the frequency of deception in employment interviews.

Much of the research has explored communication-related variables (Jablin et al., 1987; Jablin & McComb, 1984). One of the most explored areas is nonverbal communication including physical appearance and professional demeanor (Boor, Wartman, & Keuben, 1983), clothing (Forsythe, Drake, & Cox, 1985), and eye contact, smiles, hand gestures and head nods (Forbes & Jackson, 1980; Kasmussen, 1984). Interviewees who

display high versus low levels of nonverbal immediacy (operationalized by eye contact, smiling, posture, interpersonal distance, and body orientation) and are high in vocal activity tend to be favored by interviewers (Byrd, 1979; Forbes & Jackson, 1980; Imada & Hakel, 1977; Keenan, 1976; Keenan & Wedderburn, 1975; McGovern & Tinsley, 1978; Trent, 1978). Several researchers have concluded that a candidate's nonverbal style significantly affects judgments of honesty made by observers (Barber & Keil, 1973; Hopper, 1977; Forbes & Jackson, 1980).

While some researchers have claimed that nonverbal communication is preeminent in creating a good impression (e.g., Forbes & Jackson, 1980; Imada & Hakel, 1977; Rasmussen, 1984) other studies indicate that verbal behavior may be the more important predictor of the hiring decision (e.g., Hollandsworth, Kazelskis, Stevens, & Dressel, 1979). Some of the potentially important speech behaviors include making positive self-assessments, answering problematic questions, and speaking assertively (Britton, 1975; Clowers & Fraser, 1977; Ragan & Hopper, 1981; Wheeler, 1977).

There have been relatively few empirical investigations of the interviewee and interviewer

speech behaviors that lead to effective job interviews (Ragan, 1983; Ragan & Hopper, 1981), and nearly all of these deal with how interviewees can attain successful hiring decisions through communicating effectively (Downs, 1969; Drake, Kaplan, & Stone, 1972; Keil & Barbee, 1973). This line of research may not even be profitable because the employment interview is not useful in assessing hireability and work motivation, but only serves in judging social skills (Fletcher, 1990; Gifford, Ng, & Wilkinson, 1985). This line of research also focuses on the employment interview as a formal, standardized, one-way form of communication (Jablin, 1987).

However, a fundamental purpose of any employment interview is the exchange of information between interviewer and interviewee (Stano & Keinsch, 1982). Therefore, an "information-sharing approach" (Jablin & McComb, 1984) is useful in examining employment interviews. This approach views the interview as an interactional episode within which participants make judgments about the "goodness of fit" between applicant and organization (LaBarbara, 1988; Engler-Parrish & Millar, 1989). An effective interview, therefore, involves not just a review of the pertinent facts or information on an application, but an understanding of

how the person acts in the decision-making process and how he or she responds to unfamiliar events (Kowal, 1990).

Effective interviewing also can benefit the employee, as well as the organization (Freedman, 1992). The interview is probably the most common form of job preview that applicants receive from organizations, so it serves an important expectation-sharing function (Arvey & Campion, 1982; Jablin & McComb, 1984; Jablin et al., 1987). Unless both interactants are sure that they are receiving accurate and honest answers, judgments about the "goodness-of-fit" may be faulty.

Another reason that honesty during the interview is important to both parties is because the trust component of the interview relationship sets the tone for all future interaction (Kowal, 1990), and may determine whether or not there will be any future interaction. For example, applicants' interview outcome expectations (including likelihoods of accepting job offers) appear related to their perceptions of their interviewers as trustworthy communicators (Alderfer & McCord, 1970; Fisher, Ilgen, & Hoyer, 1979; Jablin, Tengler, & Teigen, 1982; Rynes & Miller, 1983; Schmitt & Coyle, 1976; Teigen, 1983). However, the accuracy and honesty of data collected by

interviewers has been consistently questioned (Hamble, 1980; Martin & Nagao, 1989; Reilly & Chao, 1982; Stewart & Cash, 1978; Watson & Ragsdale, 1981). Several meta-analyses of employment interview studies have found that interviewees frequently lie during the interview (e.g. Hunter & Hunter, 1984; Robertson et al., 1990). These lies usually pertain to the interviewee's abilities, aspirations, or other job-relevant characteristics, and usually occur when the information is difficult to verify, although interviewees sometimes lie about easily verifiable information such as their grade point averages and SAT scores (Martin & Nagao, 1989). Why does deception occur in employment interviews?

One reason for frequent deception in employment interviews can be found in the impression management literature. The impression management research identifies how people use communication in order to present themselves strategically to achieve certain goals. The impression management strategies chosen are affected by both the individual and the situation. According to Goffman (1959), most social behavior occurs in a conspiracy mode. In this mode, even if people are suspicious of their communicative partners' honesty, they do not betray this suspicion, at least

for the duration of the social interaction. But sometimes social behavior operates in a sparring mode (Kraut, 1978). In this case, the interaction resembles a contest in which speakers try to present themselves in one way and listeners try to see through this presentation to the speakers' real qualities.

According to Kraut (1978), an employment interview is one example of an interaction frequently performed in the sparring model because the need for a favorable self-presentation and the likelihood of a deception attempt are built into job interviews.

Another reason for the frequency of deception in employment interviews is socially desirable responding (SDR) on the part of the interviewee (Martin & Nagao, 1989). Face-to-face pressure is inherent in the interview and may influence the interviewee to stretch the truth in an effort to make a good impression. The degree of SDR also may be affected by verbal or nonverbal cues given by the interviewer (Imada & Hakel, 1977; Miller & Nagao, 1989; Kynes & Miller, 1983). For example, verbal cues (e.g., a "yes" or an "I agree") and nonverbal cues such as smiling, frowning, physical distance, and eye contact may cause interviewees to tell the interviewers what they want to hear (Martin & Nagao, 1989). If this is so, then interviewers

unwittingly may contribute to the deception that occurs during the interview.

Although it is clear from this discussion that deception detection is an important skill for both interactants in the employment interview, the focus of this study is on the interviewer's deception detection ability. As previously discussed, this study uses observers rather than conversational participants as deception detectors, so the results of this study must be considered with this fact in mind. The next area to be examined is the interviewer's experience in employment interviewing and its effect on the interviewer's skill in deception detection.

Interview Experience Literature Review

This study examines the relationship between a very specific type of experience, interview experience, and the ability to detect deception. One reason to believe that there is a connection between experience and deception detection is the effect training has had on observers. Although training and experience are not necessarily the same, both imply that people can learn from specific situations.

In a series of studies, deTurck and his associates (1990, 1991) trained observers to detect deception by focusing their attention on six verbal and nonverbal

cues. Results from these studies indicated that training observers to detect deception enhanced their judgmental accuracy significantly. The highest mean accuracy score after training was 77%, whereas the highest mean accuracy score among the untrained conditions was 63% (deTurck, 1991).

In another study, observers were provided with accuracy feedback after they made each veracity judgment. Even though they had not received specific training on which verbal and nonverbal cues distinguished deceptive from truthful communication, the observers were able to detect deception accurately over 70% of the time (Zuckerman et al., 1983).

The second reason to believe that there may be a connection between interview experience and deception detection is the similarity between familiarity and interview experience. When people have had experience with a particular person or situation, they become familiar with that person or situation. Familiarity has been shown in some cases to increase accuracy in detecting deception (Brandt et al., 1980a, 1980b, 1982; Ekman & Friesen, 1974; Hayano, 1980; Murray, 1983).

However, the effects of familiarity are not altogether positive for deception detection. Too much familiarity with a person can cause accuracy to

decrease significantly (Brandt et al., 1980b).

familiarity also was found to be a detriment when people tried to detect deception among members of their own ethnic background (Seiter et al., 1990). Thus, it is unclear whether or not familiarity is an asset or a detriment to detection deception.

These studies examined familiarity with a particular person and that person's truthful and deceptive behaviors. Another study extended the research to include familiarity with a situation (DePaulo et al., 1987). This study found that familiarity with a particular kind of deceptive situation enabled people to detect deception, even though they were unfamiliar with the deceiver.

One explanation for this can be found by using a social cognition framework (Buller & Walther, 1989). The relationship between familiarity and deception detection could be due to the activation of the detector's situation schemata. Since people have more developed schemata for those situations with which they are familiar, schemata contradictory information (e.g. deceptive behavior) is recognized more readily, and will probably stand out in the detector's memory. In that case, people will be able to detect deception in familiar situations with greater accuracy than they are

able to detect deception that occurs in unfamiliar situations (Buller & Walther, 1989). If this is so, than people with experience in interview situations will be able to detect deception more accurately than people who have less experience in interview situations.

But here again the effect of familiarity may be negative (Seiter et al., 1989). One reason why too much interview experience may prove detrimental to deception detection can be explained by Langer and her associates' distinction between states of mindfulness and mindlessness (Langer, 1989; Langer, Blank, & Charowitz, 1978; Langer & Piper, 1987). They argue that if people become too familiar with a situation they become mindless communicators and fail to attend to cues. Mindless communication is characterized by a failure to become open to new information (Langer, 1989). In this case, a very experienced interviewer may become too familiar with the employment interview situation and operate as a mindless communicator.

Indeed, the evidence that experience can improve deception detection has been mixed. Some researchers found that general work experience had no effect on deception detection (e.g., DePaulo & Pfeifer, 1986; Hendershot & Hess, 1982; Kraut & Poe, 1980). Several

recent studies show that experience does improve deception detection ability when the experience is very specific and similar to the particular deceptive situation (e.g., DePaulo et al., 1987; Ekman & O'Sullivan, 1991; Zuckerman et al., 1984). General work experience is not sufficient; the experience has to be very similar to the deceptive situation. For example, most law enforcement officials were not accurate at detecting lies unless their experience was similar to the deceptive situation (Ekman & O'Sullivan, 1991).

Overall, research in deception detection has indicated that deception is a strategic communication process that often is useful for the communicator. Deception detection also is a useful communication ability in many cases, and accuracy rates in detecting deception can be affected by situational variables and individual differences. The following section presents a rationale and research questions aimed at examining the role of two individual differences, employment interview experience and conversational sensitivity, in detecting deception in employment interviews.

Rationale and Research Questions

Research has shown that deception is ubiquitous and its effect on the deceived can be harmful. Therefore,

the ability to detect deception is an important, necessary, and valuable skill. Most published studies of human deception detection show that some people are significantly more accurate than chance at distinguishing truth from lies (DePaulo & Rosenthal, 1979). Research should be directed at discovering what factors make some people better than others at performing this essential skill. The focus of this study is on two individual differences, conversational sensitivity and employment interview experience, and the role they play in deception detection during an employment interview.

There are several reasons to believe that conversational sensitivity and the ability to detect deception are related, including a theoretical connection and factors common to both.

First, there is a theoretical connection between the two. Daly and his associates (1987) identified conversational sensitivity as a social affordance particularly important or relevant to human life. The ability to detect deception also has been demonstrated to be an important, frequent, and essential part of human life, and can therefore be argued to be a social affordance (Knapp et al., 1987).

Second, greater accuracy at decoding deception may be accounted for by two relatively independent factors: greater ability to perceive specific cues that are indicative of deception (a perceptual or attentional factor) and greater tendency to interpret those cues as signals of deception (DePaulo et al., 1980). Two of the conversational sensitivity instrument dimensions are designed to measure perception and interpretation. The "detecting meaning" dimension measures a person's ability to perceive the purposes as well as the hidden meanings in what individuals are saying, and the "interpretation" dimension measures a person's ability to detect irony or sarcasm in what others say. The ability to detect hidden meanings, irony, or sarcasm would appear to aid in detecting deception, especially because irony and sarcasm are considered benign deceptive acts (Buller & Burgoon, 1993).

However, as previously discussed, conversational sensitivity is negatively correlated with social anxiety (Daly et al., 1987), and social anxiety is positively correlated to deception detection ability (DePaulo et al., 1980). Because there is mixed support for hypothesizing a relationship between conversational sensitivity and deception detection, the following research question is posed:

RQ1: Is conversational sensitivity related to deception detection in employment interviews?

The second individual difference of interest in this study is employment interview experience. The evidence that experience can improve deception detection has been mixed (Zuckerman et al., 1985), but there are several reasons to believe that there is a relationship between the two. First, observers who were trained to detect deception proved to be successful at doing so, as were observers who were provided with accuracy feedback after they made each veracity judgment. Apparently, people can successfully learn to detect deception, and experience might be one way they learn. Also, observers who were familiar with a deceptive situation were more accurate in detecting deception in similar situations, even if they were unfamiliar with the deceiver, than those who were not familiar with the situation (DePaulo et al., 1987). Again, this suggests that experience, which is synonymous with situational familiarity, might add to the ability to detect deception. The third reason to expect a relationship between experience and deception detection is that studies have shown that experience improved deception detection when the experience was

very specific to the particular deceptive situation (DePaulo et al., 1987).

These are good reasons to expect that more interview experience will help a person become a better deception detector, but there also is research showing that more interview experience might prove detrimental to deception detection. For example, too much familiarity with a situation may lead to mindlessness, a condition in which communicators do not observe cues or create new categories for information.

Consequently, insufficient evidence exists to support a hypothesis concerning employment interview experience and its relationship to deception detection in employment interviews, but this is an area that needs to be explored. Therefore, this research question is asked:

RQ2: Is employment interviewing experience related to deception detection in employment interviews?

The following chapter presents a detailed description of the methods and procedures used to investigate these two research questions.

CHAPTER III

METHODS AND PROCEDURES

This chapter presents a detailed description of the methods and procedures used in the present investigation, including a review of the pilot study, the procedures used in data collection, the subjects, the data collection instrument, and data analysis. The next paragraph provides an explanation of some of the major flaws in previous employment interview research and a brief overview of how the present investigation was designed to avoid these flaws.

A major flaw pointed out in previous research on employment interviews was the overreliance on resume and paper-and-pencil methodologies (Arvey, 1979; Arvey & Campion, 1982). Three recommendations were made for future studies. The first was that greater efforts be made to study realistic interview situations using videotapes of actual or simulated face-to-face interviews instead of looking at resumes alone. Another suggestion was that working people, as well as undergraduate and graduate students, act as subjects. The third recommendation was that subjects view more than one particular individual in an interview

situation. Otherwise, any significant effect observed could be unique to the specific stimulus individuals due to uncontrolled characteristics such as personal appearance and vocal tone, etc. This study was designed to meet all of these recommendations. Following is a brief overview. This experiment took place in two phases. In phase one, two simulated job interviews were videotaped. In phase two, respondents completed a questionnaire and judged the veracity of the two videotaped interviewees. However, prior to this study, a pilot study was conducted to discover any weaknesses in the video format or in the instrument administration. The pilot study involved only undergraduate students, not professionals, and the students were from a different university than the one attended by the students in the current study. The respondents in the pilot study were 55 students at Louisiana State University. In the pilot study, only one interview was conducted. It involved a male interviewer and a female interviewee. Respondents were given only three seconds in between questions in which to ascertain the veracity of the interviewee's answers. This response time was determined to be insufficient. In the pilot videotape, the number of each question was not displayed on the screen, and respondents were not

aware of which question corresponded to the answer blank on their answer sheet. All of these weaknesses were addressed in the study reported here.

Procedure

This study involved two phases. In phase one, two stimulus interviewees were videotaped during two simulated employment interviews. The two interviewees responded truthfully and deceptively to questions asked by their respective interviewers. In phase two, 150 undergraduate student and 80 professional subjects completed the Conversational Sensitivity Scale (Daly et al., 1987). The professional subjects were people who were employed full time in an occupation that required them to conduct employment interviews. Professionals as well as students were used in this study because this was a major recommendation for interview studies (Arvey & Campion, 1982). After completing the scale, subjects viewed the videotape of the two simulated employment interviews and judged the veracity of the two videotaped stimulus interviewees.

Phase One

The stimulus interviewees were a white male graduate student, aged 31, and a white female graduate student, aged 25. Both were M.A. students in the speech communication department of Louisiana State

University. The interviewees and the interviewers were all acquainted with one another, but they did not attend the same university as the students participating in the study. This is an important consideration because familiarity with the deceiver may influence deception detection (Brandt et al., 1982; McCornack & Levine, 1990b). Neither interviewee saw the other one being interviewed, nor did they see the other one's interview questions.

As previously discussed in the literature review, motivation affects the ability to deceive successfully (DePaulo, Lanier, & Davis, 1983; DePaulo, Stone, & Lassiter, 1985). High motivation increases arousal and the desire not to be detected, but it also increases the cognitive burden of the deception by prompting deceivers to concentrate more on communication (Knapp et al., 1987). Therefore, highly motivated communicators may be able to concoct a successful verbal lie but are less successful at masking their lies through their nonverbal behavior (Buller & Burgoon, 1993). Employment interviewees would be classified as highly motivated because they want to acquire the job. Therefore, in order to more closely simulate an actual job interview, an effort was made to motivate the interviewees in this study. Zuckerman and

Driver (1985), in their meta-analysis of deception studies, found researchers attempted to motivate subjects by promising them monetary rewards for performing well or telling them the deceptive task was a test of skill. In this study, the interviewees were told that deception was a skill frequently associated with job success and that if they were successful in their deceptions they would be paid \$20. (They did not ask how their success would be evaluated. Both were paid \$20 after the interviews were videotaped.)

First, the male interviewee was interviewed by a male graduate student. Then the female interviewee was interviewed by a female graduate student. They were all kept separate until the interviews began. Both videotaped interviews were designed to resemble an actual employment interview as closely as possible. The interviewees and the interviewers wore business attire appropriate to an employment interview, and the setting was arranged to resemble an office. The questions asked in both interviews were ones typically asked in entry-level employment interviews (see Lindquist, 1989). However, no easily verifiable questions, such as grade point average, were asked because respondents may be less likely to deceive about something that could be easily checked.

On the videotape, the interviewers were audible but not visible. This procedure has been used in other studies (e.g., Buller et al., 1991a; Buller et al., 1991b) and is useful in focusing attention on the interviewee. Close-up shots focused on the interviewees so that the people viewing the videotape appeared to be seated across a desk from the interviewees.

Four separate lists of interview questions were prepared (see Appendix A for a list of the questions). List one was seen by the male interviewer, list two was seen by the male interviewee, list three was seen by the female interviewer, and list four was seen by the female interviewee. Different questions were prepared for both interviews to minimize observer fatigue.

List one was seen only by the male interviewer. It consisted of fifteen questions, ten of which initiated a topic and five that were follow-up questions. Each follow-up question was worded so that if the subject lied on the initial question, he or she also would have to lie on the follow-up question. The follow-up questions were placed randomly throughout the list when it was designed by the researcher. The method used for the random placement was a coin toss for each question. The random placement prevented the interviewee from detecting a pattern of follow-up questions and then

rehearsing an answer to the follow-ups. The male interviewer received the list ten minutes before the videotaped interview occurred.

The male interviewee received list two. This list was different from the first list in two ways. First, the list only contained the ten initiating questions and not the follow-up questions found on the interviewer's list. This insured that some of the interviewee's responses were rehearsed and some were spontaneous. As previously discussed, the deceptive cues to rehearsed deceptions are different than the deceptive cues shown in spontaneous deception. Also, because deceivers are likely to use both rehearsed and spontaneous lies in employment interviews, this study incorporated both in order to make the interviews as realistic as possible. The second difference between the interviewer's and the interviewee's list was that five questions on the interviewee's list were marked with an asterisk, indicating that they were to be answered deceptively. The male interviewee received the list 30 minutes before the interview, and was privately instructed to lie as convincingly as possible when answering the marked questions. He was not told there would be follow-up questions. The interviewers

were unaware of which, if any, questions involved deception.

The third list was given to the female interviewer. Although the questions were different the format was the same as for the male interviewer with ten initiating questions and five follow-up questions asked at random. The female interviewer received the list ten minutes before the interview.

List four was given to the female interviewee. The questions were different, but the format was similar to the male interviewee's list of questions. After the second interview was completed, the four interactants were thanked and they left the studio.

This study used two interviews in response to the previously discussed recommendations made for employment interview studies (Arvey & Campion, 1982). It was important to the internal validity of this study to ascertain that the respondents did not react differently to the two interviewees. Therefore, z-tests were conducted between the correlations of the dependent variable, accuracy of deception detection, and the independent variables in interview 1 and interview 2. No significant differences were found between the correlations in interview 1 and interview 2 for either students or professionals. In the student

sample, the following z -scores were computed between deception detection accuracy's correlation with these independent variables: work experience ($z = .025$, $p > .10$), conversational sensitivity ($z = 0$, $p = 1$), age ($z = .17$, $p > .10$), education ($z = 1.61$, $p > .10$), and employment interview experience ($z = .71$, $p > .10$). In the professional sample, the following z -scores were computed between deception detection accuracy's correlation with these independent variables: work experience ($z = .25$, $p > .10$), conversational sensitivity ($z = .37$, $p > .10$), age ($z = 0$, $p = 1$), education ($z = .32$, $p > .10$), and employment interview experience ($z = .51$, $p > .10$). These results indicate that the students responded similarly to both the male interviewee and the female interviewee, as did the professionals. A t -test was performed to determine if males and females responded differently to the two interviewees. The results of this test showed no significant difference in males and females response to the male interviewee ($t(212) = 1.22$, $p = .22$) or to the female interviewee ($t(216) = 1.67$, $p = .10$).

The two interviews were videotaped by professional camera people in a university television studio and edited by a professional film editor. Each question was clearly marked (Question One, Question Two, etc.)

on the videotape before the interviewer asked the question, so that respondents would know which question to answer. After each question was answered by the interviewee, the screen faded to black for 10 seconds. This allowed the respondents time to judge that question's veracity before going on to the next question.

Phase Two

In the second phase, 150 undergraduate students and 80 professionals completed the Conversational Sensitivity Scale (Daly et al., 1987) and judged the veracity of the videotaped interviewees' responses. Data gathering from the student sample occurred in the classroom. No more than twenty students viewed the video at any one time so that each student could clearly see the interviewees. Data gathering from the professionals generally took place at the respondents' respective offices. Six was the maximum number of professionals that participated at any one time, because a smaller television screen was used and respondents needed to sit closer to have the same level of visibility as the students.

As soon as respondents entered the room they were given a six-page questionnaire. The top sheet asked for demographic information such as sex, age,

education, number of years of work experience, number of years of interviewing experience, and number of interviews conducted per year. Pages 2-5 contained the Conversational Sensitivity Scale. Page 6 was the answer sheet for the videotaped interviews (see Appendix B for the questionnaire). The answer sheet consisted of two sets of fifteen responses of "truth" or "lie" to correspond with the fifteen questions asked in each of the two interviews. At the bottom of the answer sheet was an open-ended question asking, "Who do you think is the better deceiver, and why?"

After answering the Conversational Sensitivity Scale questions the respondents were told that they were to judge the veracity of two job applicants. Respondents viewed the videotape and judged whether or not the interviewees were answering truthfully. The experiment required 35 minutes to complete.

Subjects

This study used both undergraduate students and professionals as subjects. There are two reasons that this sample was chosen. First, as previously mentioned, the recommendation was made that both students and professionals be used in employment interview studies (Arvey & Campion, 1982). Secondly, it seemed likely that students and working people would

have differing degrees of employment interview experience, one of the independent variables of interest in this study.

One hundred and fifty students and 80 professional people participated as subjects. The students were enrolled in a variety of communication classes at Southeastern Louisiana University. The professionals all were employed in fields requiring them to interview employees. Initial contact with the working people was made through their professional association, The Baton Rouge Society for Human Resource Managers. Volunteers were obtained from this group, and these volunteers provided access to other professionals. Demographic information about the two samples follows.

In the student sample, sixty-six (44%) were male and 84 (56%) were female. The ages ranged from 18 to 46, with the majority (53%) between 19 and 21. Fourteen (9%) were black, 130 (87%) were white, four (3%) were Native American, and two (1%) were Hispanic.

Length of total work experience (in years) ranged from 0 to 25. Fifty-one (35.2%) had never worked, and 58 (39%) had worked less than five years. Total interviewing experience (in years) ranged from 0 to 9, with 121 (91%) of the respondents reporting that they had no experience in interviewing.

Seventeen (12%) students had received formal training in interviewing and 133 (88%) had received no formal training. Nineteen (14%) had received human resource management training, and 117 (86%) had received none.

To summarize, most of the students were white, between 19 and 21 years of age, had never worked, had never interviewed anyone, and had received no training in interviewing or human resource management.

In the professional sample, thirty-five (44%) were male and 45 (56%) were female. They ranged in age from 20 to 78 years of age, with 50 (63%) aged 30 years old or older. Four (5%) were black, 75 (94%) were white, and 1 (1%) was Hispanic.

Their years of work experience ranged from 1 to 50, with 72 (90%) reporting more than five years work experience. Sixty-six (83%) reported two or more year's experience in interviewing. Over 50% reported that they conducted more than twenty interviews per year, and over 25% reported that they conducted more than one hundred interviews in a year. Thirty-four (43%) had formal training in interviewing techniques, and 45 (57%) had none. Thirty-eight (48%) had received human resource management training, and 41 (52%) had none.

To summarize, most of the professionals were white, over 30 years old, had worked for five years or more, had interviewed for at least two years, had conducted more than twenty interviews per year, and had received more training in interviewing and in human resource management than the students had.

T-tests were computed to establish the distinctiveness of the two samples. The results of these tests indicated that the professionals were significantly older ($M = 35.94$, $SD = 12.08$) than the students ($M = 22.03$, $SD = 3.85$) $t(85) = -9.90$, $p < .0001$; had significantly more years of work experience ($M = 14.91$, $SD = 10.67$) than the students ($M = 3.44$, $SD = 3.85$) $t(89) = -9.24$, $p < .0001$; and had significantly more years of experience interviewing ($M = 8.18$, $SD = 8.9$) than the students ($M = 1.18$, $SD = 7.20$) $t(136) = -5.9$, $p < .0001$. Respondents were asked to answer yes or no to the questions "Have you had any training in interviewing?" and "Have you had any training in human resource management?" (yes = 1, no = 2). Significantly more professionals answered yes ($M = 1.57$, $SD = .50$) to the question regarding training than did students ($M = 1.79$, $SD = .51$) $t(165) = 3.09$, $p < .01$ and to the question regarding human resource management training ($M = 1.52$, $SD = .50$) than did

students ($M = 1.83$, $SD = .48$) $t(157) = 4.46$, $p < .0001$. Respondents were asked to indicate their highest level of education (high school = 1, college = 2, graduate school = 3). The professionals had significantly more education ($M = 2.15$, $SD = .64$) than students ($M = 1.15$, $SD = .49$) $t(130) = -12.16$, $p < .0001$. There were no significant ethnic differences between the professionals and students. Although these results demonstrate that the professional and student samples were significantly different in many variables, the variables of greatest interest to this study are accuracy in deception detection and employment interview experience (number of interviews conducted in one year). Students were significantly more accurate than professionals ($M = 16.49$, $SD = 2.64$) $t(151) = 2.23$, $p < .05$. Professionals had significantly more employment interview experience ($M = 136.92$, $SD = 285.16$) than did students ($M = 4.42$, $SD = 19.71$) $t(74) = -4.02$, $p < .0001$.

Data Collection Instruments

This study included two independent variables, conversational sensitivity and employment interview experience. Conversational sensitivity was measured using the Conversational Sensitivity Scale (Daly et al., 1987). This is a 36-item, 5-point Likert-like

scale developed to delineate the structure of conversational sensitivity. The maximum possible score on the Conversational Sensitivity Scale is 180. The overall scores ranged from 94 to 180 ($M = 130.60$, $SD = 16.10$). The students' scores ranged from 96 to 166 ($M = 131.17$, $SD = 15.21$). The professionals' scores ranged from 94 to 180 ($M = 129.54$, $SD = 17.69$). The results of a t -test showed no significant difference in the conversational sensitivity scale means of the students and the professionals, $t(142) = .70$, $p < .10$. The males' scores ranged from 98 to 168 ($M = 130.41$, $SD = 15.30$). The scores for females ranged from 94 to 180 ($M = 130.76$, $SD = 16.75$). Again, there were no significant differences in the conversational sensitivity means between males and females, $t(223) = -.17$, $p < .10$.

Using this scale, Daly and his associates (1987) discovered eight dimensions of conversational sensitivity: detecting meanings, conversational memory, conversational alternatives, conversational imagination, eavesdropping enjoyment, interpretation, perceiving affinity, and conversational dominance. A confirmatory factor analysis performed by Honeycutt and his associates (1992) supported the eight conversational sensitivity factors. They found that

reliabilities for the sensitivity factors ranged from .67 to .86 (M alpha = .80). However, Daly and his associates (1987) recommend that the scale also be used unidimensionally. They found that the internal consistency estimate (alpha) of all the scale items combined was above .80.

The second independent variable included in this study was employment interview experience. Respondents were asked in the questionnaire to report how many times per month and per year they interviewed someone in an employment interview. Respondents reported their annual interviews more than they reported their monthly interviews, so the annual figure was used to measure their employment interview experience. Employment interview experience was treated as a continuous variable, and not grouped into high, medium, and low categories. By following this procedure, information was not lost. The overall interview experience ranged from 0 to 999 interviews per year (M = 50.86, SD = 180.32). Interview experience for the student sample ranged from 0 to 150 (M = 4.42, SD = 19.71), with 82% never having interviewed anyone. Interview experience for the professional sample ranged from 0 to 999 (M = 136.92, SD = 285.16). Because this variable resulted in highly skewed data, it was necessary to standardize

it. Therefore, a log transformation was performed on the data. Log transformation is useful when dealing with extremely skewed data because it pulls in the outliers (Bialock, 1979). The transformed variable was used in all of the data analyses. Using the log transformation, a t -test showed that professionals had significantly more experience ($M = 3.06$, $SD = 2.28$) than did students ($M = -1.5$, $SD = 1.79$) $t(124) = -15.09$, $p < .0001$. There was no significant difference in employment interview experience between males ($M = -.04$, $SD = 2.85$) and females ($M = .18$, $SD = 3.03$) $t(208) = -.56$, $p > .10$.

The dependent variable in this study was deception detection accuracy. Accuracy was measured by the number of correct assessments made about each interview question. In order to be accurate respondents had to detect not only the deceptive statements, but also the truthful ones. This method is used in most deception detection studies and it eliminates the possibility of a "lie bias" where observers judge all statements as deceptive (McCornack & Levine, 1990b). The highest accuracy score possible for the combined truth and lie questions was 30. The overall scores (students and professionals combined) ranged from 10 to 23 ($M = 16.96$, $SD = 2.55$). The students' scores ranged from 10

to 22 ($M = 17.27$, $SD = 2.45$). The professionals' scores ranged from 11 to 23 ($M = 16.49$, $SD = 2.64$). The results of a t -test on the accuracy score showed that students were significantly more accurate in detecting deception than were professionals ($t(151) = 2.18$, $p < .05$). The scores for males ranged from 11 to 22 ($M = 17.38$, $SD = 2.43$). The females' scores ranged from 10 to 23 ($M = 16.70$, $SD = 2.60$). A t -test indicated that the males were significantly more accurate at detecting deception than the females ($t(221) = 2.04$, $p < .05$).

All of the data used in this study were measured at the interval level. The method used for data analysis will be discussed next.

Data Analysis

The data in this study was analyzed in three ways: looking at the overall sample, comparing professionals and students, and comparing males and females. The professional/student comparison was used because there was a significant difference in employment interview experience, one of the independent variables of interest, in these two groups. The male/female comparison was used because there is a theoretical basis to expect differences in these two groups.

The first research question asked if conversational sensitivity was related to deception detection in employment interviews. A confirmatory factor analysis was performed on the Conversational Sensitivity Scale to confirm Daly and his associates' (1987) factors. A maximum likelihood factor analysis was used because this method gives better estimates than principal factor analysis in large samples (SAS Institute, 1985). The results of this factor analysis generally supported the eight dimensions previously identified. Conversational sensitivity has been analyzed as a unidimensional and multidimensional construct (Daly et al., 1987; Honeycutt et al., 1992). Therefore, both types of analyses were used in this study.

The first research question asked if conversational sensitivity was related to deception detection in employment interviews. It was analyzed using a Pearson's product-moment correlation. Pearson's r was chosen because it is an appropriate method for examining relationships between variables that are measured at interval or ratio level (Blalock, 1979; Smith, 1988). Bonferroni tests were performed for all significant correlations. Any correlations that lost significance after the Bonferroni test was performed

were reported. Multiple regression was used to determine which, if any, linear combination of the conversational sensitivity dimensions was related to deception detection. A stepwise regression was performed first to ascertain which dimensions should be placed in the final regression model. Changes in the R^2 were evaluated from one step to another. Inclusion of the dimensions in the final regression model stopped when the addition to the R^2 by a new variable did not increase the amount of variance explained by the model. The second guide used to determine the number of variables to include in the final regression model was the C_p . When the right model was achieved, the C_p was near p .

A t -test was conducted to determine if there were any differences in the conversational sensitivity dimensions with males and females and with students and professionals.

Finally, Pearson's r was used to determine the relationship between the conversational sensitivity dimensions and detecting truth, spontaneous lies, and rehearsed lies for professionals, students, males, and females.

The second research question asked if employment interview experience was related to deception detection

in employment interviews. This question was first analyzed using a Pearson's r . Then multiple regression was used to determine if a linear combination of employment interview experience, the conversational sensitivity dimensions, education, work experience, interview training, and human resource management training offered more insight into deception detection ability than did employment interview experience alone. A stepwise regression analysis with all of these variables was performed first to determine which variables should be placed in the final regression model. Finally, two chi-square tests were performed to analyze the data from the open-ended question which asked respondents to identify which deception detection cues were used. This analysis was conducted to determine if there were any significant differences between the cues used by professionals and students and also males and females.

CHAPTER IV

RESULTS

This chapter presents the results of the investigation. The first section describes the results of the confirmatory factor analysis of the Conversational Sensitivity Scale, the scale's reliability estimates using Cronbach's (1951) alpha, and correlation matrices of the dependent and independent variables. The second section includes results concerning the first research question, and the third section includes results concerning the second research question. Section four gives the results of the chi-square analyses of the open-ended question concerning which deception cues the respondents used. Analyses for the present investigation were conducted using the SAS statistical package.

Factor Analysis of the Conversational Sensitivity Scale

The maximum likelihood factor analysis that was performed on the Conversational Sensitivity Scale supported the eight conversational sensitivity factors previously identified (Daly et al., 1987; Honeycutt et al., 1992). However, three of the factors, eavesdropping joy, predicting conversation, and conversational dominance, had very low loadings, and were excluded from the data analysis. The results of the factor analysis

are presented in Table 1. Reliabilities for the factors ranged from .73 to .87 (M alpha = .81).

Table 2 through Table 6 presents the correlation matrices of the dependent and independent variables examined in this study. This information is given for the overall sample, the students, the professionals, the males, and the females involved in this study.

Results of Analysis for Question One

Research question one asked if conversational sensitivity was related to deception detection ability in employment interviews. The conversational sensitivity scale has been used as both a unidimensional and a multidimensional instrument. The unidimensional measure was not significantly related to deception detection in employment interviews for the overall sample ($r = -.05$, $p > .10$), the students ($r = -.06$, $p > .10$), the professionals ($r = -.05$, $p > .10$), the males ($r = -.03$, $p > .10$) or the females ($r = -.05$, $p > .10$).

The research question was then analyzed using the conversational sensitivity scale as a multidimensional instrument. As previously mentioned, only the five factors with the highest reliabilities were used in data analysis. These factors were conversational

Table 1
Factor Analysis of Conversational Sensitivity Scale

Factor 1: Conversational Memory (.84)

- 25. I have a good memory for conversations. (.83, .01)
- 18. If you gave me a few moments I could probably easily recall a conversation I had a few days ago. (.67, .02)
- 30. I can often remember specific words or phrases that were said in the past. (.67, .04)
- 11. I'm good at recalling conversations I have had in the past. (.66, .02)
- 3. I think I remember conversations I participate in more than the average person. (.62, .02)

Factor 2: Conversational Alternatives (.84)

- 19. I'm very good at coming up with neat ways of saying things in conversation. (.68, .01)
- 26. I am good at wording the same thought in different ways. (.67, -.05)
- 31. In virtually any situation I can think of ways to say something. (.67, -.07)
- 12. If people ask me how to say something I can come up with a number of different ways of saying it. (.65, -.01)
- 1. I have the ability to say the right thing at the right time. (.51, .04)

Factor 3: Detecting Meaning (.75)

- 33. I often find hidden meanings in what people are saying in conversations. (.65, .05)
- 29. I often hear things in what people are saying that others don't seem to even notice. (.64, .03)
- 34. I often notice double meanings in conversation. (.56, .02)

Table 1 continued:

Factor Analysis of Conversational Sensitivity Scale

Factor 4: Perceiving Affinity (.73)

- 7. Often, in conversations, I can tell whether the people in the conversation like or dislike one another. (.78, .03)
- 15. I can tell in conversations whether people are on good terms with one another. (.66, .03)
- 8. I can often tell when someone is trying to get the upper hand in a conversation. (.58, .01)

Factor 5: Conversational Imagination (.87)

- 13. I often make up conversations in my mind. (.91, -.01)
- 5. I think up imaginary conversations in my head. (.91, .05)
- 20. Compared to most people, I spend a great deal of time inventing "make-believe conversations". (.65, -.02)

Factor 6: Eavesdropping Enjoyment (correlation = .62)

- 4. I would enjoy being a fly on the wall listening in on other peoples' conversations. (.83, -.01)
- 36. I really enjoy overhearing conversations. (.73, .03)

Factor 7: Predicting Conversations (correlation = .49)

- 24. In conversations I seem to be able to often predict what another person is going to say even before he or she says it. (.64, -.03)
- 35. I often have a sense that I can forecast where people are going in conversations. (.53, .04)

Table 1 continued:

Factor Analysis of Conversational Sensitivity Scale

Factor 8: Conversational Dominance

16. I'm often able to figure out who's in charge in
conversations. (.89, .01)

Note: The number preceding each item is the number of the item as it appears in the questionnaire. The numbers in parentheses following each item reflect the primary and secondary factor loadings, respectively. Items 11 and 20 were reverse coded. The number in parentheses following each factor heading is the alpha reliability for the factor based on the items shown under each factor. Twelve items are excluded from this table and from the computation of the alphas because of weak factor loadings.

Table 2
Correlation Matrix for Dependent and Independent Variables-- Overall

	Mean	SD	Ed	Ex	Cs	Cm	Ca	Dm	Pa	Ci
Co	17.00	2.54	-.22**	-.23**	-.05	.003	-.07	-.08	-.07	.06
Ed	1.80	.72	-	.60**	.08	.03	.11	.04	.07	-.02
Ex	.08	2.94		-	.05	.02	.11	.04	.06	-.03
Cs	130.60	16.09			-	.66**	.70**	.69**	.61**	.50**
Cm	18.00	4.01				-	.38**	.36**	.27**	.19**
Ca	17.90	3.36					-	.48**	.39**	.22**
Dm	10.60	2.39						-	.36**	.21**
Pa	12.30	2.09							-	.12
Ci	8.99	3.51								-

Note: Va = variables, Co = accuracy of deception detection, Ed = education, Ex = employment interview experience, Cs = conversational sensitivity, Cm = conversational memory, Ca = conversational alternatives, Dm = detecting meanings, Pa = perceiving affinity, Ci = conversational imagination. *p < .05. ** p < .01. n = 230 for all variables except Ed = 229 and Ex = 214.

Table 3
Correlation Matrix for Dependent and Independent Variables-- Students

Va	Mean	SD	Ed	Ex	Cs	Cm	Ca	Dm	Pa	Ci
Co	17.27	2.45	-.29**	-.08	-.06	-.06	-.02	-.03	-.08	-.02
Ed	1.15	.49	-	-.07	.04	-.006	-.02	-.03	.03	.08
Ex	-1.52	1.79		-	.03	-.03	-.05	-.001	-.005	.17*
Cs	131.17	15.21			-	.62*	.67**	.65**	.60**	.48**
Cm	18.05	3.86				-	.32**	.34**	.26**	.14
Ca	17.72	3.81					-	.38**	.43**	.21**
Dm	10.51	2.33						-	.28**	.16*
Pa	12.28	1.98							-	.07
Ci	9.44	3.54								-

Note: Va = variables, Co = correct, Ed = education, Ex = experience, Cs = conversational sensitivity, Cm = conversational memory, Ca = conversational alternatives, Dm = detecting meaning, Pa = perceiving affinity, and Ci = conversational imagination.

* $p < .05$, ** $p < .01$. $n = 150$ for all variables except Ed = 149 and Ex = 139.

Table 4

Correlation Matrix for Dependent and Independent Variables-- Professionals

Va	Mean	SD	Ed	Ex	Cs	Cm	Ca	Dm	Pa	Ci
Co	16.49	2.64	.009	-.28*	-.05	.10	-.14	-.15	-.05	.12
Ed	2.15	0.64	-	.29*	.28*	.14	.29**	.11	.13	.20
Ex	3.06	2.28		-	.20	.16	.24*	.03	.16	.01
Cs	129.53	17.69			-	.73**	.76**	.76**	.62**	.55**
Cm	17.89	4.30				-	.47**	.38**	.28*	.30**
Ca	18.10	3.97					-	.64**	.35**	.27*
Dm	10.65	2.52						-	.48**	.32**
Pa	12.35	2.30							-	.23*
Ci	8.15	3.32								-

Note: Va = variables, Co = accuracy of deception detection, Ed = education, Ex = employment interview experience, Cs = conversational sensitivity, Cm = conversational memory, Ca = conversational alternatives, Dm = detecting meanings, Pa = perceiving affinity, Ci = conversational imagination.

* $p < .05$, ** $p < .01$. $n = 80$ for all variables except Ex = 75.

Table 5
Correlation Matrix for Dependent and Independent Variables--Males

Va	Mean	SD	Ed	Ex	Cs	Cm	Ca	Dm	Pa	Ci
Co	17.38	2.43	-.12	-.13	-.03	.02	-.01	-.08	-.07	.09
Ed	1.52	0.82	-	.65**	.21*	.21*	.18	.09	.15	-.02
Ex	-0.04	2.85		-	.11	.21*	.06	.03	.03	.02
Cs	130.40	15.30			-	.68**	.75**	.69**	.65**	.50**
Cm	17.62	3.61				-	.50**	.50**	.30**	.20*
Ca	18.37	3.80					-	.48**	.42**	.23*
Dm	10.82	2.11						-	.32**	.22*
Pa	12.32	2.09							-	.16
Ci	8.87	3.50								-

Note: Va = variables, Co = accuracy of deception detection, Ed = education, Ex = employment interview experience, Cs = conversational sensitivity, Cm = conversational memory, Ca = conversational alternatives, Dm = detecting meanings, Pa = perceiving affinity, Ci = conversational imagination.

* $p < .05$, ** $p < .01$. $n = 101$ for all variables except Ex = 96.

Table 6
Correlation Matrix for Dependent and Independent Variables--Females

Va	Mean	SD	Ed	Ex	Cs	Cm	Ca	Dm	Pa	Ci
Co	16.70	2.60	-.33*	-.30*	-.05	.01	-.15	-.10	-.07	.04
Ed	1.48	.64	-	.57*	-.04	-.11	.04	-.004	-.02	-.02
Ex	.18	3.03		-	.01	-.11	.15	.05	.08	-.07
Cs	130.76	16.75			-	.65*	.68*	.70**	.58*	.51**
Cm	18.28	4.30				-	.32*	.30**	.26*	.19*
Ca	17.45	3.87					-	.48**	.38*	.22*
Dm	10.36	2.57						-	.39*	.21*
Pa	12.29	2.10							-	.09
Ci	9.09	3.52								-

Note: Va = variables, Co = accuracy of deception detection, Ed = education, Ex = employment interview experience, Cs = conversational sensitivity, Cm = conversational memory, Ca = conversational alternatives, Dm = detecting meanings, Pa = perceiving affinity, Ci = conversational imagination.

* $p < .05$, ** $p < .01$. $n = 129$ for all variables except Ed = 128 and Ex = 118.

alternatives, detecting meaning, conversational memory, conversational imagination, and perceiving affinity. Table 7 presents the correlation results for the overall sample, students, professionals, males, and the females. None of the correlations were significant.

To further explore the relationship between conversational sensitivity and deception detection in employment interviews, multiple regression procedures were used. The five conversational sensitivity dimensions were entered into stepwise regressions for the overall sample, students, professionals, males, and females to determine if a linear combination of the dimensions might account for the variance in the deception detection variable. Table 8 shows the regression results for the overall sample, Table 9 shows the student results, and Table 10 presents results for the professional sample. Tables 11 and 12 present the results of the regression analysis for males and females, respectively. As these tables show, none of the results from the regression analysis explain a significant amount of the variance in deception detection.

Conversational sensitivity also was used as a unidimensional measure in a correlation analysis to determine its

Table 7
Correlations Between Deception Detection for the
Overall Sample, Students, Professionals, Males, and
Females and Conversational Sensitivity Dimensions

Dimen	Overall	Stu	Pro	Male	Female
Ca	-.07	-.02	-.14	-.005	-.15
Dm	-.08	-.03	-.15	-.08	-.10
Cm	.003	-.06	.10	.02	.01
Ci	.06	-.02	.12	.09	.04
Pa	-.07	-.08	-.05	-.07	-.07

Note: Ca = conversational alternatives, Dm = detecting meaning, Cm = conversational memory, Ci = conversational imagination, Pa = perceiving affinity. Overall $N = 230$, Student $n = 150$, Professional $n = 80$, Male $n = 101$, Female $n = 129$. None of these correlations is significant.

Table 8
Forward Regression Model of Accuracy of Deception
Detection and Conversational Sensitivity Dimensions for
the Overall Sample

Model	Variable	Beta	<u>t</u>	<u>p</u>	<u>R</u> ²
OvAll Accuracy (<u>F</u> (3, 229) = 1.07, <u>p</u> > .10, <u>R</u> ² = .01)					
	Detecting Meaning	-.07	-.85	.40	.006
	Con. Imagination	.06	1.20	.23	.001
	Con. Alternatives	-.04	-.81	.42	.014

Table 9
Forward Regression Model of Accuracy of Deception
Detection and Conversational Sensitivity Dimensions for
Students

Model	Variable	Beta	t	p	R ²
Student Accuracy ($F(1, 149) = .99, p > .10, R^2 = .007$)					
	Perceiving Affinity	-.10	-1.0	.32	.007

Table 10
Forward Regression Model of Accuracy of Deception
Detection and Conversational Sensitivity Dimensions for
Professionals

Model	Variable	Beta	t	p	R ²
Prof Accuracy ($F(2, 79) = 2.22, p > .10, R^2 = .05$)					
	Detecting Meaning	-.22	-1.80	.08	.02
	Con. Imagination	.15	1.62	.11	.05

Table 11
Forward Regression Model of Accuracy of Deception
Detection with Conversational Sensitivity Dimension for
Males

Model	Variable	Beta	t	p	R ²
Male Accuracy ($F(2, 100) = .97, p > .10, R^2 = .02$)					
	Detecting Meaning	-.12	-1.03	.31	.009
	Con. Imagination	.08	1.14	.26	.02

Table 12
Forward Regression Model of Accuracy of Deception
Detection and Conversational Sensitivity Dimensions for
Females

Model	Variable	Beta	t	p	R ²
Female	Accuracy ($F(2, 128) = .81, p > .10, R^2 = .01$)				
	Detecting Meaning	-.11	-1.21	.23	.02
	Con. Imagination	.04	.65	.52	.03

relationship to ability to detect truth, spontaneous lies, and rehearsed lies. No significant results were found for students, professionals, or males, but there were significant results for females. Conversational sensitivity was positively correlated with females' ability to detect truth ($r = .21, p < .02$) and their ability to detect spontaneous lies ($r = .20, p < .02$). The Bonferroni corrected alpha for this test is .02. Females' ability to detect rehearsed lies ($r = .18, p < .04$) was not significant when the more stringent Bonferroni alpha was applied.

Next, Pearson's correlation was used to see if a relationship existed between the conversational dimensions and the ability to detect truthful statements, rehearsed lies, and spontaneous lies. Table 13 presents the results of this analysis for the students, Table 14 gives results for the professionals, and Table 15 gives results for the males. As the tables show, correlations were all non-significant. However, there were significant results for the females, as shown in Table 16. Conversational alternatives was positively correlated with the females' ability to detect the truth. Detecting meaning was positively correlated with ability to

detect truth and the ability to detect spontaneous lies.

A t-test was performed that examined accuracy in detecting truth, spontaneous lies, and rehearsed lies between professionals and students and between males and females. The only result that approached significance was the difference between professionals and students in detecting truth. Professionals (\underline{M} = 20, \underline{SD} = 2.43) were more accurate at detecting the truth than were students (\underline{M} = 19, \underline{SD} = 2.03) $\underline{t}(136) = -1.86$, $p < .05$). However, the Bonferroni corrected alpha for this test is .02, and this finding is not significant.

The last analysis that investigated research question one was a t-test examining differences in the conversational sensitivity dimensions between males and females and between professionals and students. The only significant finding was between students and professionals. Students (\underline{M} = 9.44, \underline{SD} = 3.54) scored significantly higher in conversational imagination than professionals (\underline{M} = 8.15, \underline{SD} = 3.54) $\underline{t}(171) = 2.74$, $p < .006$.

Results of Analysis of Question Two

Research question two asked if employment interview experience is related to deception detection in

Table 13
Correlations Between Conversational Sensitivity
Dimensions and Accuracy in Detecting Truthful
Statements, Spontaneous Lies, and Rehearsed Lies for
Students

<u>Dimen</u>	<u>Deception Detection Accuracy</u>		
	<u>Truth</u>	<u>SL</u>	<u>RL</u>
Ca	.08	.03	.05
Ci	.08	.02	.08
Dm	.11	.10	.10
Pa	.12	.11	.02
Cm	.11	.07	.05

Note: Dimen = conversational dimension, Ca = conversational alternative, Ci = conversational imagination, Dm = detecting meaning, Pa = perceiving affinity, Cm = conversational memory. $n = 150$. None of the correlations was significant.

Table 14
Correlations Between Conversational Sensitivity
Dimensions and Accuracy in Detecting Truthful
Statements, Spontaneous Lies, and Rehearsed Lies for
Professionals

<u>Dimen</u>	<u>Deception Detection Accuracy</u>		
	<u>Truth</u>	<u>SL</u>	<u>RL</u>
Ca	.14	.05	-.05
Ci	.01	.09	.13
Dm	.19	.09	-.002
Pa	.09	.06	.01
Cm	.11	.16	.18

Note: Dimen = conversational dimension, Ca = conversational alternative, Ci = conversational imagination, Dm = detecting meaning, Pa = perceiving affinity, Cm = conversational memory. $n = 80$. None of the correlations was significant.

Table 15
Correlations Between Conversational Sensitivity
Dimensions and Accuracy in Detecting Truthful
Statements, Spontaneous Lies, and Rehearsed Lies for
Males

Dimen	<u>Deception Detection Accuracy</u>		
	Truth	SL	RL
Ca	-.01	-.02	-.004
Ci	.03	.09	.10
Dm	.05	-.04	-.02
Pa	.03	-.02	-.009
Cm	.07	.04	.04

Note: Dimen = conversational dimension. Ca = conversational alternative, Ci = conversational imagination, Dm = detecting meaning, Pa = perceiving affinity, Cm = conversational memory. $n = 101$. None of the correlations was significant.

Table 16
Correlations Between Conversational Sensitivity
Dimensions and Accuracy in Detecting Truthful
Statements, Spontaneous Lies, and Rehearsed Lies for
Females

Dimen	<u>Deception Detection Accuracy</u>		
	Truth	SL	RL
Ca	.19*	.06	.003
Ci	.03	.04	.12
Dm	.20*	.18*	.10
Pa	.16	.17	.04
Cm	.13	.17	.17

Note: Dimen = conversational dimension, Ca = conversational alternative, Ci = conversational imagination, Dm = detecting meaning, Pa = perceiving affinity, Cm = conversational memory. $n = 129$. * $p < .05$.

employment interviews. As previously mentioned, the employment interview experience data was highly skewed between the students and the professionals. Therefore, a log transformation was performed to standardize the data.

Because deception detection ability was significantly correlated with both experience and education for the overall sample and because education was strongly correlated with experience (see Table 2), a partial correlation was computed between deception detection ability, education, and employment interview experience. The partial correlation between deception detection ability and interview experience was $-.16$ and the partial correlation for deception detection ability and education was $-.06$. This analysis suggests that employment interview experience has a much stronger relationship with deception detection ability than does education.

Table 17 presents the correlation between employment interview experience and accuracy of deception detection for the overall sample, students, professionals, males, and females. Interview experience was negatively correlated with deception detection for the overall sample ($r = -.23$, $p < .001$), females ($r = -.30$, $p < .001$), and professionals ($r = .$

Table 17
Correlations Between Accuracy of Deception Detection
and Employment Interview Experience for the Overall
Sample, Students, Professionals, Males, and Females

Var	Overall n=214 r	Students n=139 r	Prof. n=75 r	Males n=96 r	Females n=118 r
Int. Exp.	-.23**	-.08	-.28*	-.13	-.30**

Note: Int. Exp.= interview experience. *p < .05,
 ** p < .001.

-.28, $p < .05$). There was no significant difference between employment interview experience and deception detection for males and students.

A multiple regression was used to determine if there was a linear combination of variables that might explain more of the variance in deception detection than employment interview experience did by itself. Five stepwise regressions were conducted, one each for the overall sample, the students, the professionals, the males, and the females, to determine which variables should be placed in the five regression models. Included in the stepwise regressions were employment interview experience, the five dimensions of the conversational sensitivity scale that had the highest factor loadings, education, work experience, interview training, and human resource management training.

Table 18 presents the results of the regression model of deception detection and detecting meaning, conversational imagination, and employment interview experience for the overall sample. As the table shows, this model is significant ($F(3,213) = 4.62$, $p = < .01$, $R^2 = .06$). An examination of the independent variables

Table 18
Forward Regression Model of Deception Detection
Accuracy, Detecting Meaning, Conversational
Imagination, and Employment Interview Experience for
the Overall Sample

Model	Variable	Beta	t	p	R ²
OvAll	Accuracy	(F (3,213) = 4.62, p < .01 R ² = .06)			
	Experience	-.20	-3.38	.001	.053
	Detecting Meaning	-.09	-1.21	.23	.058
	Con Imagination	.04	.90	.37	.062

shows a significant effect for employment interview experience ($\beta = -.20$, $t = -3.38$, $p = .001$) on deception detection.

The next regression analysis found deception detection was a function of employment interview experience, education, and perceiving affinity for students. The results of this analysis are presented in Table 19. This model also was significant ($F(3, 138) = 3.25$, $p < .05$, $R^2 = .07$). An examination of the independent variables reveals a significant effect for education ($\beta = -1.73$, $t = -2.84$, $p < .01$) on deception detection. Table 20 presents the results of the next regression analysis which found deception detection was a function of employment interview experience, conversational memory, detecting meaning, and conversational imagination for professionals. This model was significant ($F(4, 74) = 3.33$, $p < .01$, $R^2 = .16$). An examination of the independent variables revealed a significant effect for employment interview experience ($\beta = -.36$, $t = -2.76$, $p < .01$, $R^2 = .07$). A weaker, but still significant, effect was found for detecting meaning ($\beta = -.28$, $t = -2.01$, $p < .05$, $R^2 = .12$).

Table 19
Forward Regression Model of Deception Detection
Accuracy, Education, Employment Interview Experience ,
and Perceiving Affinity for Students

Model	Variable	Beta	t	p	R ²
St. Accuracy (F (3, 138) = 3.25, p < .05 R ² = .07)					
	Education	-1.73	-2.84	.01	.051
	Experience	-.14	-1.22	.23	.06
	Per. Affinity	-.10	-.94	.35	.07

Table 20
Forward Regression Model of Deception Detection
Accuracy, Employment Interview Experience,
Conversational Memory, Detecting Meaning, and
Conversational Imagination for Professionals

Model	Variable	Beta	t	p	R ²
Prof. Accuracy ($F(4, 74) = 3.33, p < .01, R^2 = .16$)					
	Experience	-.36	-2.76	.01	.07
	Con. Imagination	.13	1.34	.19	.10
	Detecting Meaning	-.28	-2.01	.05	.12
	Con. Memory	.13	1.60	.11	.16

The next regression analysis, shown in Table 21, found deception detection was a function of employment interview experience, education, and detecting meaning for males. As the table illustrates, this model was not significant.

The last regression model, shown in Table 22, found the variance in deception detection was explained by education, conversational alternatives, and employment interview experience for females. This model produced a significant solution ($F(3, 117) = 7.02, p < .001, R^2 = .16$). An examination of the independent variables showed a significant effect for education ($\beta = -1.18, t = -2.68, p < .01, R^2 = .13$).

Analysis of Deception Detection Cues

An open-ended question asked the respondents to say why they thought the interviewees were lying. When describing how they made their decision, 56% of the subjects cited nonverbal cues (eye contact especially), 16% cited verbal cues ("Her answers contradicted each other"), 5% said they used both verbal and nonverbal cues, and 23% reported using no cues. These responses were very straightforward and unambiguous and were coded by this researcher. Therefore no intercoder reliability was reported.

Table 21
Forward Regression Model of Deception Detection
Accuracy, Employment Interview Experience, Education,
and Detecting Meaning for Males

Model	Variable	Beta	t	p	R ²
Males Accuracy ($F(3, 95) = 1.27, p < .05, R^2 = .04$)					
	Experience	-.19	-1.73	.09	.02
	Education	.52	1.22	.23	.03
	Detecting Meaning	-.11	-.10	.33	.04

Table 22
Forward Regression Model of Deception Detection
Accuracy, Education, Conversational Alternatives, and
Employment Interview Experience for Females

Model	Variable	Beta	t	p	R ²
Female Accuracy ($F(3, 117) = 7.02, p < .001, R^2 = .16$)					
	Education	-1.18	-2.68	.01	.13
	Con. Alternatives	-.08	-1.42	.16	.14
	Experience	-.10	-1.08	.28	.15

Two chi-square tests were performed on this data. The first test examined differences between professionals and students in the use of four different types of deception detection cues: nonverbal cues, verbal cues, both verbal and nonverbal cues, and "don't know" which cue. The results of this analysis are shown in Table 23. As Table 23 shows, there is a significant difference between the students and the professionals regarding the deception cues that they used ($\chi^2 = 12.23$, $df = 3$, $p < .01$). Pairwise chi-square comparisons indicated that the specific difference was in the fourth category, "Don't know which cue is used". The professionals reported that they used a specific cue more often than the students did, and the students reported that they didn't know which cue they used ($\chi^2 = 7.19$, $df = 1$, $p < .01$).

The second chi-square test examined differences between males and females and the cues they used. The results of this analysis are shown in Table 24. Results showed that there was a significant gender difference in cues used ($\chi^2 = 7.89$, $df = 3$, $p < .05$). Pairwise chi-square analysis indicated that women reported that they relied more on a combination of verbal and nonverbal cues than men did ($\chi^2 = 3.84$, $df =$

1, $p < .05$). These results, and their implications for future research, will be discussed in the next chapter.

Table 23
Frequency of Use of Four Deception Detection Cues by
Professionals and Students

Type of Cue	Professionals n=66	Students n=125
Nonverbal	40	64
Verbal	12	19
Both	7	4
Don't know	7	38

$\chi^2 = 12.23$, d.f. = 3, p < .01

Table 24
Frequency of Use of Four Deception Detection Cues by
Males and Females

Type of Cue	Males n = 88	Females n = 103
Nonverbal	20	32
Verbal	20	17
Both	7	19
Don't' know	41	35

$$\chi^2 = 7.89, \text{ d.f.} = 3, p < .05$$

CHAPTER V

DISCUSSION

For the past 20 years, researchers have attempted to understand what individual differences make some people better at detecting deception than other people. The primary purpose of this study was to continue this research by examining two individual differences: conversational sensitivity and employment interview experience. The focus of this examination was to determine what relationship these characteristics had with deception detection in employment interviews.

This chapter discusses the results of this investigation. The first section discusses the research findings and their implications. The second section points out some of this study's limitations, and the third section makes recommendations for future research.

Research Findings and Implications

The first research question asked if there was a relationship between conversational sensitivity and deception detection in employment interviews. Pearson's correlations, stepwise multiple regressions,

and multiple regression analyses were conducted to investigate this question, treating the conversational sensitivity scale as both a unidimensional and a multidimensional measure. The results of the investigation showed that there was no significant relationship between overall deception detection and either the unidimensional or multidimensional measures of conversational sensitivity.

However, when deception was examined more specifically by type of lie, conversational sensitivity (treated as a unidimensional measure), was positively correlated with females' ability to detect truthful statements and spontaneous lies. There was a positive correlation between conversational sensitivity and the females' ability to detect rehearsed lies ($r = .18$, $p < .04$) until the Bonferroni corrected alpha ($p < .02$) for this test was applied. Using the more stringent Bonferroni test, the correlation between conversational sensitivity and the females' ability to detect rehearsed lies is not significant.

Conversational alternatives was positively correlated with females' ability to detect truthful statements, and detecting meanings was positively correlated with females' ability to detect truthful statements and spontaneous lies. Conversational

sensitivity appears to have no relationship to males' abilities to detect truth or deception, and it is not related to females' ability to detect rehearsed lies.

There are three factors which may explain why conversational sensitivity is not positively correlated with overall deception detection. First, it is possible that the two variables are not related, and the significant correlations that have been found with the females are due to another, unknown relationship. There may be a relationship between conversational sensitivity and deception ability, rather than deception detection ability. If this is so, then conversationally sensitive people would not be successful at detecting deception, because people who are good at deceiving are often not good at detecting the deception of others (DePaulo et al., 1980; DeVito & Hecht, 1990). One reason to think that conversational sensitivity and deception ability are related is the positive correlation between self-monitoring and conversational sensitivity and social skills and conversational sensitivity (Daly et al., 1987). Self-monitoring is positively correlated with deception ability (DePaulo et al., 1985), as are social skills (Riggio et al., 1987). There is also a negative correlation between conversational sensitivity and

social anxiety (Daly et al., 1987). Socially anxious people tend to be poor deceivers (Riggio & Friedman, 1983). With these relationships in mind, it is possible that conversational sensitivity is related to deception instead of deception detection.

The second reason that conversational sensitivity was not positively correlated to overall deception detection may be the self-report nature of the Conversational Sensitivity Scale. There are few behavioral correlates to prove that people who say they are conversationally sensitive really are, although there is evidence to suggest that their self-reports may be reliable indicators of certain abilities. For example, Daly and his associates (1987) found that people high in conversational sensitivity remembered conversations differently than those low in conversational memory. People high in conversational sensitivity made more high level inferences when listening to social exchanges and unitized conversation in smaller chunks. They also emphasized conversational characteristics in their memories of interactions, and made more self-referents about conversations than less conversationally sensitive individuals. However, this is the only behavioral correlate to conversational sensitivity that has been discovered, and it may not be

useful in detecting deception in a short-term context such as an employment interview. Daly and his associates (1987) point out that the verticality of the self-report nature of the Conversational Sensitivity Scale (i.e., are people who say they are conversationally sensitive really are?) is a point of concern.

Both of these possibilities ignore the fact that there were significant findings for females but not for males, professionals, or students. The third possible explanation for the findings is the fact that males and females respond to deception differently, and this difference may have affected these results. For example, females rely on visual channels more than males do (O'Hair et al., 1988). In this study, there was a significant difference in the cues reportedly used, with females reporting that they used a combination of verbal and nonverbal cues more than the males reported. Perhaps the use of these cues enabled females that were conversationally sensitive to detect truthful statements and spontaneous lies more accurately than males.

The second research question investigated whether or not employment interview experience was related to deception detection in the employment interview. This

question was analyzed using Pearson's r and multiple regression analysis. The results of the correlation analysis indicate that interview experience is significantly negatively correlated with ability to detect deception for the overall sample, professionals, and females. There was no significant correlation between interview experience and deception detection in employment interviews for males and students. However, education was significantly negatively correlated with deception detection in employment interviews for students. These findings were duplicated by the regression analysis: employment interview experience was significant and negative in the deception detection regression models for the overall sample, the professionals, and the females. Experience did not enter the regression for males and students. Education was significant and negative for the deception detection regression model for the students. One possible explanation for this is that, the more education students receive, the more confident they become of their own abilities, including deception detection. This confidence may cause them to approach a deceptive situation with less anxiety than students with less education who are unsure of themselves. Social anxiety is strongly positively correlated to

deception detection (DePaulo et al., 1980; DeVito & Hecht, 1990), so those students who are anxious will be better at detecting deception than students who are confident and have less anxiety. Therefore, more education and more confidence will result in less anxiety and less accuracy in deception detection.

This explanation would also help to explain why deception detection may be negatively correlated with employment interview experience for professionals. The more experience interviewers have in a situation, the more confident and the less anxious they will be. This lack of anxiety may result in a lack of accuracy in deception detection.

Another reason can be explained by the distinction between states of mindfulness and mindlessness (Langer, 1989; Langer, Blank, & Charowitz, 1978; Langer & Piper, 1987). Mindful communication is strategic communication that requires actively using cognitive processes to overcome old, established ways of thinking to make distinctions and create new categories. People are likely to be mindful when they encounter new situations for which they have no schematic script (Langer, 1989). However, once situations are no longer new and the relevant schematic scripts are formed, people become mindless communicators. Therefore, if

people do something so often that it ceases to be new to them (such as employment interviews), they may become mindless communicators. "If we respond to a situation as very familiar, we notice only the cues necessary to carry out the proper scenario" (Langer, 1989, p.34). If mindless communicators fail to notice the cues that accompany deception, they may fail to detect the deception.

Mindless communication is not strategic (Langer, 1989), while deception is highly strategic. Deceivers go through four distinct and deliberate steps: assessing their motives, the nature of the situation, and their relationship with the target; appraising the alternative influence messages in their communication repertoire; selecting a particular message and foregoing others; and monitoring the reactions of the target in order to formulate subsequent message choices (Buller & Burgoon, 1993). This process requires the deceiver to communicate mindfully during all of these steps. A mindful communicator will be a more effective communicator than a mindless communicator (Langer, 1989). Therefore, a deceiver almost always is going to be better at deceiving than a mindless communicator will be at detecting that deception.

However, this is not true when the detector becomes mindful. For example, when detectors were trained to notice certain deception cues, their accuracy in detecting deception generally increased (deTurck et al., 1990, 1991). This may be because they were exposed to new information, which is one factor that causes a person to become more mindful (Langer, 1989).

With these points in mind, it seems possible that employment interviewers run the risk of becoming mindless communicators, and thus less skilled deception detectors, if they become too familiar with the employment interview situation. This conclusion receives support from the fact that the professionals had significantly more employment interview experience than the students, and yet the students were significantly more accurate at detecting deception. This tentative conclusion has implications for organizations. Many organizations have the belief that the more experience interviewers have, the better they will perform. This may not be true.

On the questionnaire respondents were asked what cues they used in making their veracity judgments. Fifty-six percent of those responding to the question reported that they used nonverbal cues and 16% reported using verbal cues in making their veracity judgments.

These results are consistent with previous research which indicates that people use nonverbal cues, even when inaccurate, more than verbal cues when they try to detect deception (Stiff & Hale, 1990). This is particularly significant in employment interviews because many interviews take place with the interviewee seated across from a desk, as was true in this study. When that is the case, only the upper body is visible to the interviewer, and this is the part of the body (including hands) that is a less truthful indicator of deception and leakage cues (Ekman & Friesen, 1969, 1974). The most reliable deception detection cues are verbal and nonverbal cues combined (deTurck et al., 1990), but these cues reportedly were used by only 5% of the respondents. The results of the first chi-square test showed that the students and professionals were significantly different in the cues they used in making veracity judgments. The professionals reported that they used a specific cue more often than the students did, and the students reported that they didn't know which cue they used more often than the professionals did. However, the students were significantly more accurate in detecting deception than the professionals. This finding suggests that the professionals are confident of their cues, but they may

be using the wrong ones. The students, on the other hand, are not sure which cues they use, and they may be looking at a variety of different ones.

The second chi-square showed that the women reported using both verbal and nonverbal cues in making their veracity judgment more than the men did. The males were significantly more accurate than the women in detecting deception, and yet the women reported using the most reliable deception detection cues (deTurck, et al., 1990) more than the men. One explanation is that, while women are better at decoding nonverbal cues and interpreting the emotion in vocal tone, they are more polite than men in their decoding of nonverbal cues and avoid "eavesdropping" by noticing leakage during deception (DeVito & Hecht, 1990; Rosenthal & DePaulo, 1979).

This study expanded the existing theory on experience and on conversational sensitivity by exploring their relationship to deception detection. The next section discusses some of the study's limitations.

Limitations of the Present Study

Although this study was carefully designed to meet the recommendations that have been made for interview research (Arvey & Campion, 1982), several limitations

still exist. The first limitation involves the use of simulated, instead of real, employment interviews. Even though the situation was designed to be as realistic as possible, observers were not interviewing the interviewees for real jobs. The second potential limitation involves the sample and the third involves the Conversational Sensitivity Scale (Daly et al., 1987).

The use of simulated versus real employment interviews has two implications for the results of the study. First, the observers were acting as surrogate interviewers and may have been less motivated to detect deception in this study than they would be in a real life situation. Although the deceivers were motivated to deceive (by monetary rewards), the observers were given no such motivation. People will be more mindful communicators when they are motivated to achieve some purpose (Langer, 1989), and this mindfulness should increase their accuracy in deception detection. Therefore, future research should motivate the deception detectors as well as the deceivers. Secondly, using observers to make veracity judgments has implications for the external validity of this experiment because observers and participants differ in their accuracy judgments and in the cues they use to

make these judgments (Buller et al., 1991). Participants have a stronger tendency to make more favorable attributions about a conversational partner's actions than do observers, and they are less accurate in their veracity judgments than observers are. This may be because participants have less cognitive capacity available for processing cues while also fulfilling their conversational responsibilities (Buller et al., 1991).

There are two perspectives of the participant/observer dilemma as it applies to this investigation. In an employment interview, the deception detector would probably be a participant, not an observer. In that case, the accuracy judgments made in this study by observers may be unrealistically high. However, in an employment interview situation, the deception detector might be more motivated to detect deception than the observers were in this study (Kowal, 1990). In that case, the accuracy judgments might be unrealistically low. It is impossible to tell which is the case based on the information available. However, the research on mindfulness suggests that motivation, which leads to mindfulness, (Langer, 1989) would make a participant better than an observer at detecting deception. These limitations could be overcome by

using actual employment interview situations in data gathering. However, serious ethical and legal obstacles are inherent in using real employment interviews for research. Another possibility would be to have subjects actually interview another subject and then make veracity judgments. This procedure still would not solve the problem with motivation, but it would make a more realistic experiment.

Another limitation of this study is the sample. The subjects were almost all white (88%), and the majority were female (56%). This has two implications for deception detection accuracy. First, individuals are more accurate when judging the veracity of members from different ethnic groups than when judging the veracity of members of their own ethnic group (Seiter et al., 1987). Therefore, the results of this study might be different if the interviewer was white and the interviewee were black, or Hispanic, or Chinese.

Secondly, because women and men detect deception differently, the results might be different if there were a majority of men instead of women participating. Women generally are superior than men at decoding nonverbal cues, but they tend to interpret the deceptive encodings as the deceiver wants them to be interpreted. Therefore, women are less accurate than

men in detecting deception (DePaulo, Zuckerman, & Rosenthal, 1980).

A possible limitation of this study is that there were an unequal number of lies in the two interviews. The questions about which the interviewee was instructed to lie were chosen at random, and the male interviewee lied on eight questions while the female interviewee lied on seven questions. It does not appear that this discrepancy affected the study as the z-tests demonstrated that the subjects did not respond to the interviewees with any significant difference, but the discrepancy should be noted.

It should also be noted that in both interviews the interviewer and the interviewee were acquainted with one another. Although familiarity is a factor in deception detection, there is no reason to expect that it was a factor in this study because the interviewers were not asked to make veracity judgments, and the observer/surrogate interviewers were not acquainted with the interviewees. However, future studies might use interviewer/interviewee dyads that are not acquainted with one another.

Finally, the self-report nature of the Conversational Sensitivity Scale (Daly et al., 1987) is a limitation in this study, as identified in the

discussion of the results. Before this scale is used in a study examining behavior instead of attitude, the scale needs to be tested using behavioral correlates. Daly and his associates have done this already with the dimension of conversational memory. Suggestions concerning this will be discussed in the next section.

Although these limitations were present in this study, they do not negate the fact that deception detection research is an important area that should be the topic of future research, given the individual and organizational costs associated with deception. The next section presents some suggestions for this research.

Suggestions for Future Research

This study provided valuable information about observers acting as surrogate employment interviewers and their accuracy at detecting deception in job interviews. It provided empirical evidence that employment interview experience may have a negative effect on a person's ability to detect deception in that same situation. This evidence has theoretical and practical value, and should be expanded upon. The present investigation represents a step in the process of understanding deception detection in a particular communicative setting, the employment interview.

future research can build on this foundation to provide a better understanding of deception detection. The next few paragraphs identify some possible areas of study.

The conversational sensitivity construct should continue to be investigated. Despite its weakness in this study, it has been strongly related to other variables, such as self-monitoring, perceptiveness, social skills, and imagined interaction. The Conversational Sensitivity Scale needs more examination. It is a first attempt at empirically explicating the conversational sensitivity construct, and is acknowledged as a less than optimal measure for tapping the construct (Daly et al., 1987). With the exception of conversational imagination and eavesdropping enjoyment all of the dimensions could be examined for behavioral correlates. One way to do this would be to show subjects videotapes of conversations, asking them to answer questions about these conversations relating to the dimensions, and then correlating their scores on the Conversational Sensitivity Scale with their scores on the behavioral correlates questions to see how valid the scale is. For example, subjects could watch a videotape of a conversation and respond to the statements under the

dimension of detecting meaning ("I often notice double meanings in conversations".) Their success in identifying the double meanings in the videotaped conversation could then be correlated with their response to that question in the scale. If they rate themselves as being very high in that area, and yet in actuality they were not able to detect the double meanings in the videotaped conversation, then researchers would know that the scale has validity problems.

The role of conversational sensitivity and deception should be examined. It is possible that people high in conversational sensitivity are better at deceiving than they are at detecting deception. One reason to think that people high in conversational sensitivity are good at deception is the negative correlation between conversational sensitivity and social anxiety (Daly et al., 1987). It is possible that the characteristics of socially anxious people that make them more adept at decoding deceptive cues are not found in conversationally sensitive people. Some of the characteristics that are related to deception ability are social, communication, and self-monitoring abilities. These are all correlated with conversational sensitivity (Daly et al., 1987). The

fact that this study found a limited relationship between conversational sensitivity and deception detection adds strength to the argument that conversational sensitivity may be related to deception.

Finally, several areas of deception detection should be investigated. For example, the research into the acceptability of different deceptive acts (Hopper & Bell, 1984) presents an important distinction in deception detection research. A person's motivation for detecting benign deceptive acts probably will not be as great as the motivation for detecting exploitative deceptive acts, because the cost involved in being deceived is different. In many cases, people might enjoy being the target of benign deceptive acts, but most people will feel threatened or at least resentful at being the target of an exploitative deceptive act. This difference in perception of acceptability may affect their motivation to detect the deception, which may in turn affect their detection ability.

Another area of research to be discussed involves the role of suspicion and deception detection in employment interviews. At least three different constructs related to suspicion have been distinguished (McCornack & Levine, 1990). These include an

individual difference called generalized communicative suspicion (GCS), which is a predisposition toward being suspicious about the communication of others, situationally-aroused suspicion (i.e. "state" suspicion), and a judgmental bias toward processing all of a specific communicative partner's messages as lies (i.e., lie bias). GCS is a relatively enduring individual trait and is measured using a 14-item scale (McCornack & Levine, 1989). State suspicion is aroused by specific contextual cues, and can be defined as a belief that messages produced in a particular setting by a particular interactant may be deceptive. The third type of suspicion, lie bias, requires that the interactants be familiar to one another, and is therefore of little interest in employment interview research.

The effect of these different kinds of suspicion has been investigated in terms of romantic relationships (McCornack & Levine, 1990). The results were that GCS enhanced accuracy in detecting deception, and that up to a point state suspicion increased accuracy as well. However, when people become extremely state suspicious, they become so aroused that they begin making erroneous judgments (Toris & DePaulo, 1985). To date, the research on GCS and state

suspicion has been limited to romantic relationships. It would be useful to extend this research into the employment interview. As has been previously discussed, the employment interview situation increases suspicion (Kraut, 1978). What are the effects of a high GCS interviewer in a high state suspicion situation such as an employment interview? Would this amount of suspicion increase deception detection, or would it prove to be too much suspicion and therefore decrease suspicion? These are questions that should be answered.

It would be valuable to examine the process of mindfulness/mindlessness as it applies to employment interviews. At what point do interviewers become so familiar with their job that they operate mindlessly? One way of examining this would be to conduct longitudinal studies and have interviewers keep diaries where they identify what cues they attend to in each interview they conduct. Content analyses of these diaries may be able to determine at which point interviewers become so familiar with the interview process that they become mindless. Another way would be to get baseline data on cognitive response times for experienced and inexperienced interviewers using a novel topic. Then the interviewers could respond to

case studies that involved interviewing. Their response time would be measured to see if the experienced interviewer is faster or makes more errors.

Langer (1989) says that people can control their mindless behavior and convert it to mindfulness. Another area of research could be to investigate how this conversion takes place. Training interviewers to detect deception may cause them to approach interviews in a new way, which would add to their mindfulness (Langer, 1989).

Because men and women detect deception differently, it would be interesting to study gender interactions. Men generally are better able to control leakage during deception, and women generally are less accurate at detecting deception than men. This study deliberately used same-sex dyads in the videotaped interviews to control for gender effects, but other studies could use mixed-sex dyads. DePaulo and her associates (1985) found that successful deception detection was more readily accomplished when opposite sex judgments were made. It would be interesting to see if this is true in employment interview situations.

Another avenue of research is to examine ethnic influences on deception detection in employment interviews. Several questions specifically concerning

ethnic influences have been raised by recent studies. For example, Seiter and his associates (1989) compared three ethnic groups--Caucasian, Hispanic, and Asian-American--in terms of their accuracy in detecting deception. They found that interethnic perceptions of veracity were better than intraethnic perceptions of veracity, although the findings concerning vocal expressions and deception detection were less conclusive (Seiter et al., 1989), which brings up the question of why this is so. Another area concerns nonverbal leakage differences between ethnic groups. Nonverbal communication varies from culture to culture (DeVito & Hecht, 1990). In that case, do different ethnic groups exhibit different nonverbal leakage of deception? The workplace is changing, and more and more different ethnic groups are applying for jobs. Therefore, investigating ethnic influences would have practical as well as theoretical value.

Finally, because the employment interview plays such an important role in organizational life, it would be valuable to investigate ways to make it a more effective communication tool. One area to examine is whether or not panel interviews with mixed sex and/or mixed ethnic members help in detecting deception. There is reason to expect that they would because

people are better at detecting deception when the deceiver is of a different gender and ethnic background (DePaulo et al., 1985; Seiter et al., 1989). Panel interviews also could control for the previously discussed observer/participant difference in detecting deception because one panel member could serve as an observer.

In conclusion, the study reported here provided behavioral support for the role interview experience plays in deception detection in employment interviews. Employment interview experience was negatively correlated to accuracy in detecting deception in employment interviews. This finding suggests several areas toward which future research should go.

First, it is important to discover why employment interview experience is negatively correlated with deception detection in employment interviews. If it is because familiarity causes mindlessness, research should be directed toward discovering when this mindlessness occurs and what steps can be taken to prevent it. Another area of research would concern various situations under which overfamiliarity, and thus mindlessness, might occur. For example, is a physician's ability to detect deception in patients affected by experience with patients? Are teachers

less able to detect deception in their students after they have taught for a certain period of time.

Another area of interest in this study was the role of conversational sensitivity and deception detection. Conversational sensitivity was found to be positively correlated to females' ability to detect truthful statements, spontaneous lies, and rehearsed lies. Two dimensions of the conversational sensitivity scale, conversational alternatives and detecting meaning, were positively correlated to females' ability to detect truthful statements, detecting meaning was positively correlated to females' ability to detect spontaneous lies. Conversational sensitivity is still a significant area of research, and the conversational sensitivity scale should be refined and studied more, paying particular attention to behavioral correlates of the scale.

Deception is strategic communication which is prevalent in all areas of life. Although deception can be useful for the deceiver in a variety of ways, it often harms the deceived. Therefore, deception and deception detection are equally important, and communication scholars should continue investigating both of these forms of communication.

REFERENCES

- Alderfer, C., & McCord, C. (1970). Personal and situational factors in the recruitment interview. Journal of Applied Psychology, 54, 377-385.
- Arvey, R., & Campion, J. (1982). The employment interview: A summary and review of recent research. Personnel Psychology, 35, 281-322.
- Babbitt, L., & Jablin, F. (1985). Characteristics of applicants' questions and employment screening outcomes. Human Communication Research, 11, 507-535.
- Barber, J., & Keil, E. (1973). Experimental techniques of job interview training for the disadvantaged: Videotape feedback behavior modification and microcounseling. Journal of Applied Psychology, 56, 209-213.
- Bauchner, J., Brandt, B., & Miller, G. (1977). The truth/deception attribution: Effects of varying levels of information availability. In B. Rubin (Ed.), Communication Yearbook 1, (pp. 229-243). New Brunswick: Transaction Books.
- Bauchner, J., Kaplan, E., & Miller, G. (1980). Detecting deception: The relationship of available information to judgmental accuracy in initial encounters. Human Communication Research, 6, 253-264.
- Berger, R. (1977). Machiavellianism and detecting deception in facial nonverbal communication. Journal of Psychology, 44, 25-31.
- Bernstein, V., Hakel, M., & Harlan, A. (1975). The college student as interviewer: A threat to generalizability? Journal of Applied Psychology, 60, 266-268.
- Blalock, H. (1979). Social statistics. New York: McGraw-Hill.
- Bok, S. (1978). Lying: Moral choices in public and private life. New York: Pantheon Books.

- Bok, S. (1983). Secrets. New York: Pantheon Books.
- Bond, C., & Robinson, M. (1988). The evolution of deception. Journal of Nonverbal Behavior, 12, 295-307.
- Boor, M., Wartman, S., & Reuben, D. (1983). Relationship of physical appearance and professional demeanor to interview evaluations and rankings of medical residency applicants. Journal of Psychology, 113, 61-65.
- Brandt, D., Miller, G., & Hocking, J. (1980a). Effects of self-monitoring and familiarity on deception detection. Communication Quarterly, 28, 3-10.
- Brandt, D., Miller, G., & Hocking, J. (1980b). The truth-deception attribution: Effects of familiarity on the ability of observers to detect deception. Human Communication Research, 6, 99-110.
- Brandt, D., Miller, G., & Hocking, J. (1982). Familiarity and lie detection: A replication and extension. Western Journal of Speech Communication, 46, 276-290.
- Buck, R. (1984). The communication of emotion. New York: Guilford Press.
- Buller, D. (1987). Deception by strangers, friends, and intimates: Attributional biases due to relationship development. Paper presented at the annual meeting of the Speech Communication Association, Boston.
- Buller, D., & Aune, R. (1987). Nonverbal cues to deception among intimates, friends, and strangers. Journal of Nonverbal Behavior, 11, 269-290.
- Buller, D., & Burgoon, J. (1993). Deception. In J. Daly & J. M. Wiemann (Eds.), Communicating strategically, (pp. 3-55). Hillsdale, NJ: Lawrence Erlbaum.
- Buller, D., Comstock, J., Aune, R., & Strzyzewski, K. (1989). The effect of probing on deceivers and truth-tellers. Journal of Nonverbal Behavior, 13, 139-204.

- Buller, D., Strzyzewski, K., & Hunsaker, F. (1991). Interpersonal deception: The inferiority of conversational participants as deception detectors. Communication Monographs, 58, 25-40.
- Buller, D., & Walther, J. (1989). Deception in established relationships: Application of schema theory. Paper presented at the annual meeting of the Western Speech Communication Association, Spokane, Washington.
- Burgoon, J. (1985). The relationship of verbal and nonverbal codes. In B. Dervin & M. Voight (Eds.), Progress in communication sciences (pp. 77-111). Norwood, NJ: Ablex.
- Byrd, M. (1979). The effects of vocal activity and race of applicant on the job selection interview decision. Unpublished doctoral dissertation, University of Missouri, Columbia.
- Camden, C., Motley, M., & Wilson, A. (1984). White lies in interpersonal communication: A taxonomy and preliminary investigation of social motivations. Western Journal of Speech Communication, 48, 309-325.
- Carney, E. (1986). Listening for effect. American Salesman, 31, 26-29.
- Chertkoff, J., & Baird, S. (1971). Applicability of the big lie technique and the last clear chance doctrine in bargaining. Journal of Personality and Social Psychology, 20, 31-50.
- Christie, R., & Geis, R. (1970). Studies in machiavellianism. New York: Academic Press.
- Clowers, M., & Fraser, R. (1977). Employment interview literature: A perspective for the counselor. Vocational Guidance Quarterly, 26, 13-26.
- Comadena, M. (1982). Accuracy in detecting deception: Intimate and friendship relationships. In M. Burgoon (Ed.), Communication yearbook 6 (pp. 446-472). Newbury Park, CA: Sage.
- Cody, M., Marston, P., & Foster, M. (1984). Deception: Paralinguistic and verbal leakage. In K. Bostrom (Ed.), Communication Yearbook 8 (pp. 466-490). Newbury Park, CA: Sage.

- Cody, M., & McLaughlin, M. (1990). The psychology of tactical communication. Bristol, PA: Multilingual Matters Ltd.
- Comadena, M. (1982). Accuracy in detecting deception: Intimate and friendship relationships. In M. Burgoon (Ed.), Communication yearbook 6 (pp. 446-472). Newbury Park, CA: Sage.
- Daly, J., Vangelisti, A., & Daughton, S. (1987). The nature and correlates of conversational sensitivity. Human Communication Research, 14, 167-202.
- Dante, A. (1940). The divine comedy: Inferno (C. Singleton, Trans.). Princeton, NJ: Princeton University Press. (Original work written 1302).
- DeMeuse, K. (1987). A review of the effects of nonverbal cues on the interview process. Journal of Occupational Psychology, 60, 207-226.
- DePaulo, B. (1978). Decoding discrepant nonverbal cues. Journal of Personality and Social Psychology, 36, 313-323.
- DePaulo, B., Lanier, K., & Davis, T. (1983). Detecting the deceit of the motivated liar. Journal of Personality and Social Psychology, 45, 1096-1103.
- DePaulo, B., Lassiter, G., & Stone, J. (1982). Attentional determinants of success at detecting deception and truth. Personality and Social Psychology Bulletin, 8, 273-279.
- DePaulo, B., & Pfeifer, R. (1986). On-the-job experience and skill at detecting deception. Journal of Applied Social Psychology, 16, 249-267.
- DePaulo, B., & Rosenthal, R. (1979). Telling lies. Journal of Personality and Social Psychology, 37, 1713-1722.
- DePaulo, B., Stone, J., & Lassiter, G. (1985). Deceiving and detecting deceit. In B.R. Schlenker (Ed.), The self and social life. New York: McGraw-Hill.

- DePaulo, B., Stone, J., & Tang, J. (1987). Physical attractiveness and skill at detecting deception. Personality and Social Psychology Bulletin, 13, 177-187.
- DePaulo, B., Zuckerman, M., & Rosenthal, R. (1980a). Humans as lie detectors. Journal of Communication, 30, 129-139.
- DePaulo, B., Zuckerman, M., & Rosenthal, R. (1980b). The deceptions of everyday life. Journal of Communication, 30, 216-218.
- deTurck, M. (1991). Training observers to detect spontaneous deception: Effects of gender. Communication Reports, 4, 81-89.
- deTurck, M., Harsziak, J., Bodhorn, D., & Texter, L. (1990). The effects of training social perceivers to detect deception from behavioral cues. Communication Quarterly, 38, 189-199.
- deTurck, M., & Miller, G. (1985). Deception and arousal: Isolating the behavioral correlates of deception. Human Communication Research, 12, 181-201.
- deTurck, M., & Miller, G. (1990). Training observers to detect deception. Human Communication Research, 16, 603-620.
- deTurck, M., & Steele, M. (1988). Once a liar, always a liar: Effects of individuating information on the utilization of base rates in deceptive attributions. Communication Reports, 1, 14-20.
- DeVito, J., & Hecht, M. (1990). The nonverbal communication reader. Prospect Heights, IL: Waveland Press.
- Dipboye, R., Fromkin, H., & Wiback, K. (1975). Relative importance of applicant sex, attractiveness, and scholastic standing in evaluation of job applicant resumes. Journal of Applied Psychology, 60, 39-43.
- Downs, C. (1969). Perceptions of the selection interview. Personnel Administration, 32, 8-20.

- Drake, L., Kaplan, H., & Stone, R. (1972). How do employers value the interview? Journal of College Placement, 32, 47-51.
- Dworkin, R., & Goldfinger, S. (1985). Processing bias: Individual differences in the cognition of situations. Journal of Personality, 53, 480-501.
- Ehninger, D. (1977). On inferences of the "Fourth Class". Central States Speech Journal, 28, 158-160.
- Einhorn, L. (1981). An inner view of the job interview: An investigation of successful communicative behaviors. Communication Education, 30, 217-228.
- Ekman, P. (1985). Telling Lies. New York: Norton.
- Ekman, P., & Friesen, W. (1969). Nonverbal leakage and clues to deception. Psychiatry, 32, 88-105.
- Ekman, P. & Friesen, W. (1974). Detecting deception from the body or face. Journal of Personality and Social Psychology, 38, 270-277.
- Ekman, P., Friesen, W., & Scherer, K. (1976). Body movement and voice pitch in deceptive interaction. Semiotica, 16, 23-27.
- Ekman, P., & O'Sullivan, M. (1991). Who can catch a liar? American Psychologist, 46, 913-920.
- Elliot, G. (1979). Some effects of deception and level of self-monitoring on planning and reacting to a self-presentation. Journal of Personality and Social Psychology, 37, 1282-1292.
- Engler-Parish, P., & Millar, F. (1989). An exploratory relational control analysis of the employment screening interview. Western Journal of Speech Communication, 53, 30-52.
- Exline, R., Thibaut, J., Hickey, C., & Gumpert, P. (1970). Visual interaction in relation to Machiavellianism and an unethical act. In R. Christie & F. Geis (Eds.), Studies in machiavellianism (pp. 53-75). New York: Academic Press.

- Feldman, R., Devin-Sheehan, L., & Allen, V. (1978). Nonverbal cues as indicators of verbal dissembling. American Educational Research Journal, 15, 217-231.
- Feldman, R., Jenkins, L., & Popoola, O. (1979). Detection of deception in adults and children via facial expressions. Child Development, 50, 350-355.
- Feldman, R., & White, J. (1980). Detecting deception in children. Journal of Communication, 30, 121-139.
- Fisher, C., Ilgen, D., & Hoyer, W. (1979). Source of credibility, information, favorability, and job offer acceptance. Academy of Management Journal, 22, 94-103.
- Fleischmann, S. (1991). The messages of body language in job interviews. Employment Relations Today, 18, 161-167.
- Fletcher, C. (1990). The relationships between candidate personality, self-presentation strategies, and interviewer assessments in selection interviews: An empirical study. Human Relations, 43, 739-751.
- Forbes, R., & Jackson, P. (1980). Nonverbal behavior and the outcome of selection interviews. Journal of Occupational Psychology, 53, 65-72.
- Forsythe, S., Drake, M., & Cox, C. (1985). Influence of applicant's dress on interviewer's selection decisions. Journal of Applied Psychology, 70, 374-378.
- Freedman, R. (1992). Back to the basics of interviewing. HR Focus, 69, 10-11.
- Geis, F., & Moon, T. (1981). Machiavellianism and deception. Journal of Personality and Social Psychology, 41, 766-775.
- Geizer, K., Rarick, D., & Soldow, G. (1977). Deception and judgment accuracy: A study in person perception. Personality and Social Psychology Bulletin, 3, 446-449.
- Ghiselli, E. (1966). The validity of a personnel interview. Personnel Psychology, 19, 389-395.

- Gibson, J. J. (1979). The ecological approach to visual perception. Boston: Houghton Mifflin.
- Gifford, R., Ng, C., & Wilkinson, M. (1985). Nonverbal cues in the employment interview: Links between applicant qualities and interviewer judgments. Journal of Applied Psychology, 70, 729-736.
- Goffman, E. (1959). The presentation of self in everyday life. Garden City, NY: Doubleday.
- Goodall, D., & Goodall, H. (1982). The employment interview: A selective review of the literature with implications for communication research. Communication Quarterly, 30, 116-123.
- Greene, J. O., O'Hair, D., Cody, M. J., & Yen, C. (1985). Planning and control of behavior during deception. Human Communication Research, 11, 335-364.
- Grice, P. (1976). Logic and conversation. In P. Cole & J. Morgan (Eds.), Syntax and Semantics, Vol. 3: Speech Acts (pp. 41-58). New York: Academic Press.
- Grice, P. (1989). Studies in the way of words. Cambridge, MA: Harvard University Press.
- Gustafson, L., & Orne, M. (1965). The effects of task and method of stimulus presentation on the detection of deception. Journal of Applied Psychology, 48, 383-387.
- Hale, J., & Stiff, J. (1990). Nonverbal primacy in veracity judgments. Communication Reports, 3, 75-83.
- Hample, D. (1980). Purposes and effects of lying. The Southern Speech Communication Journal, 46, 33-47.
- Hankiss, A. (1980). Games con men play: The semiosis of deceptive interaction. Journal of Communication, 30, 104-112.
- Harper, R., Wiens, A., & Matorazzo, J. (1978). Nonverbal communication: State of the art. New York: Wiley and Sons.

- Harrison, A., Hwalek, M., Raney, D., & Fritz, J. (1978). Cues to deception in an interview situation. Social Psychology, 41, 156-161.
- Hayano, D. (1980). Communicative competency among poker players. Journal of Communication, 30, 61-84.
- Hendershot, J., & Hess, A. (1982). Detecting deception: The effects of training and socialization levels on verbal and nonverbal cue utilization accuracy. Unpublished manuscript, Auburn University, Alabama.
- Hocking, J., Bauchner, J., Kaminski, E., & Miller, G. (1979). Detecting deceptive communication from verbal, visual, and paralinguistic cues. Human Communication Research, 6, 33-45.
- Hocking, J., & Leathers, D. (1980). Nonverbal indicators of deception: A new theoretical perspective. Communication Monographs, 47, 119-137.
- Hollandsworth, J., Kazelskis, R., Stevens, J., & Dressel, M. (1979). Relative contributions of verbal, articulative and nonverbal communication to employment interview decisions in the job interview setting. Personnel Psychology, 32, 359-367.
- Honeycutt, J., Edwards, R., & Zagacki, K. (1990). Imagined interaction, conversational sensitivity, and communication competence. Presented at the annual meeting of the Speech Communication Association, Chicago.
- Honeycutt, J., Zagacki, K., & Edwards, R. (1992). Imagined interaction, conversational sensitivity, and communication competence. In K. Pope & J. Singer (Eds.), Imagination, Cognition, and Personality, 12 (pp. 139-157). Amityville, NY: Baywood Publishing Company.
- Hopper, R. (1977). Language attitudes in the employment interview. Communication Monographs, 44, 346-351.
- Hopper, R., & Beil, K. (1984). Broadening the deception construct. Quarterly Journal of Speech, 70, 288-302.

- Hosman, L. (1991). The relationships between need for privacy, loneliness, conversational sensitivity, and interpersonal communication motives. Communication Reports, 4, 73-80.
- Imada, A., & Hakel, M. (1977). Influence of nonverbal communication and rater proximity on impressions and decisions in simulated employment interviews. Journal of Applied Psychology, 62, 295-300.
- Jablin, F. (1987). Organizational entry, assimilation, and exit. In F. Jablin, L. Putnam, K. Roberts, & L. Porter (Eds.), Handbook of Organizational Communication (pp. 679-740). Newbury Park, CA: Sage.
- Jablin, F., & McComb, K. (1984). The employment screening interview: An organizational assimilation and communication perspective. In K. Bostrom (Ed.), Communication Yearbook 8 (137-163). Newbury Park, CA: Sage.
- Jablin, F., Tengler, C., & Teigen, C. (1982). Interviewee perceptions of employment screening interviews: Relationships among perceptions of communication satisfaction, interviewer credibility and trust, interviewing experience, and interview outcomes. Paper presented at the annual meeting of the International Communication Association, Boston, MA.
- Keenan, A. (1976). Effects of nonverbal behavior of interviewers on candidates' performances. Journal of Occupational Psychology, 49, 171-176.
- Keenan, A., & Wedderburn, A. (1975). Effects of nonverbal behavior of interviewers on candidates' impressions. Journal of Occupational Psychology, 48, 129-132.
- Keil, E., & Barbee, J. (1973). Behavior modification and training the disadvantaged job interviewer. Vocational Guidance Quarterly, 22, 50-56.
- Knapp, M., Cody, M., & Reardon, K. (1987). Nonverbal signals. In C. Berger, (Ed.), Handbook of communication science (pp. 385-419). Newbury Park: Sage.

- Knapp, M., & Comadena, M. (1979). Telling it like it isn't: A review of theory and research on deceptive communications. Human Communication Research, 5, 270-285.
- Knapp, M., Hart, R., & Dennis, H. (1974). An exploration of deception as a communication construct. Human Communication Research, 1, 15-29.
- Kohnken, G. (1987). Training police officers to detect deceptive eye-witness statements. Does it work? Social Behavior, 2, 1-17.
- Kowal, D. (1990). Emphasize integrity assessment in interviews. Personnel Journal, 69, 66-71.
- Krauss, R., Geller, V., & Olson, C. (1976). Modalities and cues in the detection of deception. Paper presented at the annual meeting of the American Psychological Association, Washington, D.C.
- Kraut, R. (1978). Verbal and nonverbal cues in the perception of lying. Journal of Personality and Social Psychology, 36, 380-391.
- Kraut, R. (1980). Humans as lie detectors: Some second thoughts. Journal of Communication, 30, 209-216.
- Kraut, R., & Poe, D. (1980). On the line: The deception judgments of customs inspectors and laymen. Journal of Personality and Social Psychology, 39, 784-798.
- LaBarbara, B. (1988). Recruiting and interviewing: The trump card of the personnel game. Supervision, 49, 14-16.
- Langer, E. (1989). Mindfulness. Reading, MA: Addison Wesley.
- Langer, E., Blank, A., & Chanowitz, B. (1978). The mindlessness of ostensibly thoughtful action. Journal of Personality and Social Psychology, 36, 635-642.
- Langer, E., & Piper, A. (1987). The prevention of mindlessness. Journal of Personality and Social Psychology, 53, 280-287.

- Levine, T., & McCornack, S. (1989). Distinguishing between types of suspicion and measuring a predisposition toward suspicion: Two studies validating a measure of trait suspicion. Paper presented at the annual meeting of the Speech Communication Association, San Francisco, CA.
- Lewicki, R. (1983). Lying and deception: A behavioral model. In M. Bazerman & R. Lewicki (Eds.), Negotiating in Organizations (pp. 68-90). Newbury Park, CA: Sage.
- Lewis, S., & Pruitt, D. (1971). Orientation, aspiration level, and communication freedom in integrative bargaining. Proceedings of the 79th Annual Convention of the American Psychological Association, 6, 221-222.
- Lindskold, S., & Walters, P. (1983). Categories for acceptability of lies. Journal of Social Psychology, 120, 129-136.
- Lippard, P. (1988). "Ask me no questions, I'll tell you no lies": Situational exigencies for interpersonal deception. Western Journal of Speech Communication, 52, 91-103.
- Littlepage, G., & Pineault, M. (1979). Detection of deceptive factual statements from the body and the face. Personality and Social Psychology Bulletin, 5, 325-328.
- Logue, C. (1981). Transcending coercion: The communicative strategies of slaves on antebellum plantations. Quarterly Journal of Speech, 67, 31-46.
- Lykken, D. (1979). The detection of deception. Psychological Bulletin, 86, 47-53.
- Maier, N. (1966). Sensitivity to attempts at deception in an interview situation. Personnel Psychology, 19, 55-65.
- Maier, N., & Lavrakas, P. (1976). Lying behavior and evaluation of lies. Perceptual and Motor Skills, 42, 575-581.
- Maier, N., & Thurber, J. (1968). Accuracy of judgments of deception when an interview is watched, heard, and read. Personnel Psychology, 21, 23-30.

- Martin, C., & Nagao, D. (1989). Some effects of computerized interviewing on job applicant responses. Journal of Applied Psychology, 74, 72-80.
- Matarazzo, J., Wiens, A., Jackson, K., & Manaugh, T. (1970). Interviewee speech behavior under conditions of endogenously-present and exogenously-induced motivational states. Journal of Clinical Psychology, 26, 141-148.
- Mayfield, E. (1964). The selection interview: A reevaluation of published research. Personnel Psychology, 17, 239-260.
- McClintock, C., & Hunt, R. (1975). Nonverbal indicators of affect and deception in an interview setting. Journal of Applied Social Psychology, 5, 54-67.
- McCornack, S. (1989). The logic behind lies: A rational approach to deceptive message production. (Doctoral dissertation, University of Illinois at Urbana-Champaign, 1989). Dissertation Abstracts International, 60, 4432.
- McCornack, S. (1992). Information manipulation theory. Communication Monographs, 59, 1-16.
- McCornack, S. & Levine, T. (1990a). When lies are uncovered: Emotional and relational outcomes of discovered deception. Communication Monographs, 57, 119-139.
- McCornack, S., & Levine, T. (1990b). When lovers become leery: The relationship between suspicion and accuracy in detecting deception. Communication Monographs, 57, 219-231.
- McCornack, S., Levine, S., Solowczuk, K., Torres, H., & Campbell, D. (1992). When the alteration of information is viewed as deception: An empirical test of information manipulation theory. Communication Monographs, 59, 17-30.
- McCornack, S., & Parks, M. (1986). Deception detection and relationship development: The other side of trust. In M. McLaughlin (Ed.) Communication Yearbook 9, (pp. 337-389). Beverly Hills, CA: Sage.

- McCornack, S., & Parks, M. (1990). What women know that men don't: Sex differences in determining the truth behind deceptive messages. Journal of Social and Personal Relationships, 7, 107-118.
- McGovern, T., & Tinsley, H. (1978). Interviewers' evaluations of interviewee nonverbal behavior. Journal of Vocational Behavior, 13, 163-171.
- Mehrabian, A. (1971). Nonverbal betrayal of feeling. Journal of Experimental Research in Personality, 5, 64-73.
- Mehrabian, A. (1972). Nonverbal communication. Chicago: Aldine.
- Mehrabian, A. (1981). Silent messages: implicit communication of emotions and attitudes. Belmont, Ca.: Wadsworth.
- Metts, S., & Chronis, H. (1986). An exploratory investigation of relational deception. Paper presented at the annual meeting of the International Communication Association, Chicago.
- Miller, G. (1982). Telling it like it isn't and not telling it like it is: Some thoughts on deceptive communication. In J. Sisco (Ed.), The Jensen lectures: Contemporary communication studies (pp. 91-116). Tampa: University of South Florida.
- Miller, G., & Burgoon, J. (1982). Factors affecting witness credibility. In N. Kerr & R. Bray (Eds.), The psychology of the courtroom (pp. 169-194). New York: Academic Press.
- Mongeau, P. (1988). Deception in close relationships. Paper presented at the annual meeting of the Western Speech Communication Association, San Diego.
- Morency, N., & Krauss, R. (1982). The nonverbal encoding and decoding of affect in first and fifth graders. In R. Feldman (Ed.), Development of nonverbal behavioral skill (pp. 181-199). New York: Springer-Verlag.
- Morris, G. (1988). Accounts in selection interviews. Journal of Applied Communication Research, 16, 82-98.

- Motley, M., & Smith, N. (1989). Effects of temperament upon hiring decisions: A preliminary examination of global personality traits and communicator compatibility. Communication Reports, 2, 22-30.
- Murray, J. (1983). The detection of interviewees' verbal deceptions from their accompanying overt nonverbal behavior (doctoral dissertation, Florida State University, 1983). Dissertation Abstracts International, 44, 3601.
- Neuliep, J., & Mattson, M. (1990). The use of deception as a compliance-gaining strategy. Human Communication Research, 16, 409-421.
- O'Hair, D., Cody, M., Goss, B., & Kraye, K. (1988). The effect of gender, deceit orientation and communicator style on macro-assessments of honesty. Communication Quarterly, 36, 77-93.
- O'Hair, D., Cody, M., & McLaughlin, M. (1981). Prepared lies, spontaneous lies, machiavellianism, and nonverbal communication. Human Communication Research, 7, 325-340.
- Perry, T., & Barney, J. (1981). Performance lies are hazardous to organizational health. Organizational Dynamics, 10, 24-36.
- Planalp, S., & Honeycutt, J. (1985). Events that increase uncertainty in personal relationships. Human Communication Research, 11, 593-604.
- Pruitt, D., & Lewis, S. (1975). Development of integrative solutions in bilateral negotiation. Journal of Personality and Social Psychology, 31, 621-633.
- Ragan, S. (1983). A conversational analysis of alignment talk in job interviews. In R. Bostrum, (Ed.), Communication yearbook 7, (pp. 502-516).
- Ragan, S., & Hopper, R. (1981). Alignment talk in the job interview. Journal of Applied Communication Research, 9, 85-103.
- Rasmussen, K. (1984). Nonverbal behavior, verbal behavior, resume credentials, and selection interview outcomes. Journal of Applied Psychology, 69, 551-556.

- Reilly, R., & Chao, G. (1982). Validity and fairness of some alternative employee selection procedures. Personnel Psychology, 35, 1-61.
- Reinsch, N., & Stano, M. (1984). Student experiences in employment interviews. Paper presented at the annual meeting of the International Communication Association. San Francisco.
- Riggio, R., & Friedman, H. (1983). Individual differences and cues to deception. Journal of Personality and Social Psychology, 45, 899-915.
- Riggio, R., Tucker, J., & Throckmorton, B. (1987). Social skills and deception ability. Personality and Social Psychology Bulletin, 13, 568-577.
- Riggio, R., Tucker, J., & Widaman, K. (1987). Verbal and nonverbal cues as mediators of deception ability. Journal of Nonverbal Behavior, 11, 126-145.
- Robertson, I., Gratton, L., & Rout, U. (1990). The validity of situational interviews for administrative jobs. Journal of Organizational Behavior, 11, 69-76.
- Rosenthal, R., & DePaulo, B. (1979). Sex differences in eavesdropping on nonverbal cues. Journal of Personality and Social Psychology, 37, 273-285.
- Ruhnow, R., Noe, R., Odom, R., & Adamson, S. (1992). Interviews: A look at their value and reliability. HR Focus, 69, 13-15.
- Rynes, S., & Miller, H. (1983). Recruiter and job influences on candidates for employment. Journal of Applied Psychology, 68, 147-154.
- St. John, W. (1985). You are what you communicate. Personnel Journal, 64, 40-43.
- SAS Institute, Inc. (1985). SAS Users' Guide: Statistics. Cary, NC: SAS Institute, Inc.
- Scherer, K. (1979). Personality markers in speech. In K. Scherer & H. Giles (Eds.), Social markers in speech (pp. 147-209). Cambridge: Cambridge University Press.

- Schmitt, N. (1976). Social and situational determinants of interview decisions: Implications for the employment interview. Personnel Psychology, 29, 79-101.
- Schmitt, N., & Coyle, B. (1976). Applicant decisions in the employment interview. Journal of Applied Psychology, 61, 184-192.
- Seibold, D., Cantrill, J., & Meyers, R. (1985). Communication and interpersonal influence. In M. Knapp & G. Miller (Eds.), Handbook of interpersonal communication (pp. 551-614). Beverly Hills, CA: Sage.
- Seiter, J., Wiseman, R., Madrid, V., Gass, R., & Riggio, R. (1990). Untangling webs: The effects of ethnicity on the detection of deception. Paper presented at the annual International Communication Association Conference, Dublin, Ireland.
- Shapiro, D. (1991). The effects of explanations on negative reactions to deceit. Shreeve, J. (1991). Machiavellian monkeys. Discover, 12, 68-74.
- Sheppard, J. (1986). Silent signals. Supervisory Management, 31, 31-33.
- Smith, M. (1988). Contemporary communication research methods. Belmont, CA: Wadsworth Publishing Company.
- Stanbeck, M., & Pearce, W. (1981). Talking to "the man": Some communication strategies used by members of "subordinate" social groups. Quarterly Journal of Speech, 67, 21-30.
- Steele, F. (1975). The open organization. Reading, MA: Addison-Wesley. Administrative Science Quarterly, 36, 614-618.
- Stewart, L. (1980). "Whistle blowing": Implications for organizational communication. Journal of Communication, 30, 90-101.
- Stewart, L., & Cash, W. (1978). Interviewing. Dubuque: Wm. C. Brown.

- Stiff, J., Hale, J., Garlick, R., & Rogan, R. (1990). Effects of cue incongruence and social normative influences on individual judgments of honesty and deceit. The Southern Communication Journal, 55, 206-229.
- Stiff, J., & Miller, G. (1986). "Come to think of it": Interrogative probes, deceptive communication, and deception detection. Human Communication Research, 12, 339-357.
- Thackeray, R., & Orne, M. (1968). Effects of the type of stimulus employed and the level of subject awareness on the detection of deception. Journal of Applied Psychology, 52, 234-239.
- Thorne, P. (1992). Hidden truths: Deception in business. International Management, 47, 96-101.
- Todd-Mancillas, W., & Kibler, K. (1979). A test of concurrent validity for linguistic indices of deception. Western Journal of Speech Communication, 43, 108-122.
- Toris, D., & DePaulo, B. (1985). Effects of actual deception and suspiciousness of deception on interpersonal perceptions. Journal of Personality and Social Psychology, 47, 1063-1073.
- Trent, L. (1978). The effects of varying levels of interviewee nonverbal behavior in the employment interview. Unpublished doctoral dissertation, Southern Illinois University.
- Turner, R., Edgley, C., & Olmstead, G. (1975). Information control in conversations: Honesty is not always the best policy. Kansas Journal of Sociology, 11, 69-89.
- Ugbah, S., & Majors, K. (1992). Influential communication factors in employment interviews. The Journal of Business Communication, 29, 145-160.
- Ulrich, L., & Trumbo, D. (1965). The selection interview since 1949. Psychological Bulletin, 63, 100-116.

- Watson, K. (1981). Oral and written linguistic indices of deception during employment interviews (Doctoral dissertation, Louisiana State University, 1981). Dissertation Abstracts International, 41, 3310A.
- Watson, K. & Ragsdale, J. D. (1981). Linguistic indices of truthful and deceptive responses to employment interview questions. Journal of Applied Communication Research, 2, 59-71.
- Wheeler, K. (1977). Assertiveness and the job hunt. In R. Alberti (Ed.), Assertiveness: Innovations, applications, issues. San Luis Obispo, CA: Impact.
- Wigley, C., Pohl, G., & Watt, M. (1989). Conversational sensitivity as a correlate of trait verbal aggressiveness and the predisposition to verbally praise others. Communication Reports, 2, 92-95.
- Wolk, R., & Henley, A. (1970). The right to lie. New York: Wyden.
- Zahn, G. (1973). Cognitive integration of verbal and vocal information in spoken sentences. Journal of Experimental Social Psychology, 9, 320-334.
- Zuckerman, M., Amidon, M., Bishop, S., & Pomerantz, S. (1982). Face and tone of voice in the communication of deception. Journal of Personality and Social Psychology, 43, 347-357.
- Zuckerman, M., DeFrank, R., Hall, J., & Lawrence, D. (1979). Facial and vocal cues of deception and truth. Journal of Experimental Social Psychology, 15, 378-396.
- Zuckerman, M., DePaulo, B., & Rosenthal, R. (1981). Verbal and nonverbal communication of deception. In L. Berkowitz (Ed.), Advances in Experimental Social Psychology, 4 (pp. 1-59). New York: Academic Press.
- Zuckerman, M., DePaulo, B., & Rosenthal, R. (1986). Humans as deceivers and lie detectors. In P. Blanck, R. Buck, & R. Rosenthal (Eds.), Nonverbal Communication in the Clinical Context (pp. 13-35). University Park, PA: The Pennsylvania State University Press.

- Zuckerman, M., & Driver, R. (1985). Telling lies: Verbal and nonverbal correlates of deception. In A.W. Siegman & S. Feldstein (Eds.), Multichannel integrations of nonverbal behavior (pp. 129-148). Hillsdale, NJ: Erlbaum.
- Zuckerman, M., Koestner, R., & Alton, A. (1984). Learning to detect deception. Journal of Personality and Social Psychology, 46, 519-528.
- Zuckerman, M., Koestner, R., & Colella, M. (1985). Learning to detect deception from three communication channels. Journal of Nonverbal Behavior, 9, 188-194.

APPENDIX A

QUESTIONS USED IN THE DECEPTION DETECTION INTERVIEWS

List of Questions Given to the Male Interviewer

1. What was your favorite course in college?
2. Why did you like it?
3. What do you think is your most valuable asset?
4. Why do you think that?
5. Where would you like to see yourself professionally ten years from now?
6. In what part of the country would you most like to settle?
7. What makes that area so attractive to you?
8. What is one of your weaknesses?
9. Describe your ideal boss.
10. What is your proudest achievement?
11. Why do you want to work for this company?
12. Would you like to own your own business some day?
13. Why or why not?
14. What was your favorite extracurricular activity in college?
15. Why?

List of Questions Given to the Male Interviewee

- *1. What was your favorite course in college?
- 2. What do you think is your most valuable asset?
- *3. Where would you like to see yourself ten years from now?
- 4. In what part of the country would you most like to see yourself ten years from now?
- 5. What is one of your weaknesses?
- *6. What is your proudest achievement?
- 7. Why do you want to work for this company?
- *8. Would you like to own you own business some day?
- *9. What was your favorite extracurricular activity?

*The interviewee was instructed to lie when asked these questions.

List of Questions Given to the Female Interviewer

1. Do you plan to go to further education?
2. What was your most rewarding college experience?
3. Why?
4. What college subjects did you like best?
5. Why?
6. Why did you select your university?
7. Do you think that your grades are a good indication of your academic achievement?
8. Why or why not?
9. Describe your ideal job?
10. What was your least favorite subject in college?
11. Why?
12. What have you learned from your mistakes?
13. Which is more important to you, the money or the type of job?
14. In what kind of a work environment are you most comfortable?
15. Why?

List of Questions Given to the Female Interviewee

1. Do you plan to go on to further education?
2. What was your most rewarding college experience?
- *3. What college subjects did you like best?
4. Why did you select your university?
- *5. Do you think that your grades are a good indication of your academic achievement?
6. Describe your ideal job.
- *7. What was your least favorite subject in college?
- *8. What have you learned from your mistakes?
9. Which is more important to you, the money or the type of job?
10. In what kind of a work environment are you most comfortable?

*The interviewee was instructed to lie when asked these questions.

APPENDIX B
QUESTIONNAIRE GIVEN TO SUBJECTS

1. Name_____ Age_____
2. Sex:_____Male _____Female
3. Education:___High School ___College
_____Grad. School
4. Ethnic Background: Please circle one:
1-Black 2-White 3-Hispanic
4-Oriental 5-Other__
5. Type of interview you do _____
6. Length of total work experience_____
7. Length of time interviewing_____
8. Length of time with present company_____
9. Approximate number of interviews you conduct:
one year_____one month_____
10. Type of job you do:
1-support 2- professional 3-managerial
11. Do you supervise people you interview?
12. Have you had any formal training in
interviewing?
13. Have you had any human resource management
training?

Sensitivity to Conversations

Following are some items asking you about how sensitive you are in everyday conversations and how attentive you may be. Please indicate a response to each item by checking the appropriate blank.

1. I have the ability to say the right thing at the right time.
Strongly disagree___:___:___:___:___Strongly agree
2. I often find myself detecting the purpose or goals of what people are saying in conversations.
Strongly disagree___:___:___:___:___Strongly agree
3. I think I remember conversations I participate in more than the average person.
Strongly disagree___:___:___:___:___Strongly agree
4. I would enjoy being a fly on the wall listening to other peoples' conversations.
Strongly disagree___:___:___:___:___Strongly agree
5. I think up imaginary conversations in my head.
Strongly disagree___:___:___:___:___Strongly agree
6. Conversations are fascinating to listen to.
Strongly disagree___:___:___:___:___Strongly agree
7. Often, in conversations, I can tell whether the people involved in the conversation like or dislike one another.
Strongly disagree___:___:___:___:___Strongly agree
8. I can often tell when someone is trying to get the upper hand in a conversation.
Strongly disagree___:___:___:___:___Strongly agree
9. In group interactions, I'm not good at determining who the leader is in the conversation.
Strongly disagree___:___:___:___:___Strongly agree
10. Many times, I pick up from conversations little bits of information that people don't mean to disclose.
Strongly disagree___:___:___:___:___Strongly agree

11. I'm terrible at recalling conversations I have had in the past.
Strongly disagree____:____:____:____:____Strongly agree
12. If people ask me how to say something I can come up with a number of different ways of saying it.
Strongly disagree____:____:____:____:____Strongly agree
13. I often make up conversations in my mind.
Strongly disagree____:____:____:____:____Strongly agree
14. I'm less interested in listening to other peoples' conversations than most people.
Strongly disagree____:____:____:____:____Strongly agree
15. I can tell in conversations whether people are on good terms with one another.
Strongly disagree____:____:____:____:____Strongly agree
16. I'm often able to figure out who's in charge in conversations.
Strongly disagree____:____:____:____:____Strongly agree
17. I can often understand why someone said something even though others don't see that intent.
Strongly disagree____:____:____:____:____Strongly agree
18. If you gave me a few moments I could probably easily recall a conversation I had a few days ago.
Strongly disagree____:____:____:____:____Strongly agree
19. I am very good at coming up with neat ways of saying things in conversations.
Strongly disagree____:____:____:____:____Strongly agree
20. Compared to most people, I don't spend much time "inventing" "make-believe" conversations.
Strongly disagree____:____:____:____:____Strongly agree
21. I'm usually the last person in a conversation to catch hidden meanings in puns and riddles.
Strongly disagree____:____:____:____:____Strongly agree
22. I can often tell how long people have known each other just by listening to their conversation.
Strongly disagree____:____:____:____:____Strongly agree

23. Most of the time, I'm able to identify the dominant person in a conversation.
Strongly disagree____:____:____:____:____Strongly agree
24. In conversations I seem to be able to often predict what another person is going to say even before he or she says it.
Strongly disagree____:____:____:____:____Strongly agree
25. I have a good memory for conversations.
Strongly disagree____:____:____:____:____Strongly agree
26. I am good at wording the same thought in different ways.
Strongly disagree____:____:____:____:____Strongly agree
27. I often have difficulty paraphrasing what another person said in a conversation.
Strongly disagree____:____:____:____:____Strongly agree
28. I'm not very good at figuring out who likes whom in social conversations.
Strongly disagree____:____:____:____:____Strongly agree
29. I often hear things in what people are saying that others don't seem to even notice.
Strongly disagree____:____:____:____:____Strongly agree
30. I can often remember specific words or phrases that were said in past conversations.
Strongly disagree____:____:____:____:____Strongly agree
31. In virtually any situation I can think of tactful ways to say something.
Strongly disagree____:____:____:____:____Strongly agree
32. I'm not very good at detecting irony or sarcasm in conversations.
Strongly disagree____:____:____:____:____Strongly agree
33. I often find hidden meanings in what people are saying in conversations.
Strongly disagree____:____:____:____:____Strongly agree
34. I often notice double meanings in conversations.
Strongly disagree____:____:____:____:____Strongly agree
35. I often have a sense that I can forecast where people are going in conversations.
Strongly disagree____:____:____:____:____Strongly agree

36. I really enjoy overhearing conversations.
Strongly disagree____:____:____:____:____Strongly agree

Deception Detection Answer Sheet

Please circle the appropriate response if you feel the answer given is the truth or is a lie.

Interview 1--Male

- | | |
|-----------|-----|
| 1. Truth | Lie |
| 2. Truth | Lie |
| 3. Truth | Lie |
| 4. Truth | Lie |
| 5. Truth | Lie |
| 6. Truth | Lie |
| 7. Truth | Lie |
| 8. Truth | Lie |
| 9. Truth | Lie |
| 10. Truth | Lie |
| 11. Truth | Lie |
| 12. Truth | Lie |
| 13. Truth | Lie |
| 14. Truth | Lie |
| 15. Truth | Lie |

Interview 2

- | | |
|-----------|-----|
| 1. Truth | Lie |
| 2. Truth | Lie |
| 3. Truth | Lie |
| 4. Truth | Lie |
| 5. Truth | Lie |
| 6. Truth | Lie |
| 7. Truth | Lie |
| 8. Truth | Lie |
| 9. Truth | Lie |
| 10. Truth | Lie |
| 11. Truth | Lie |
| 12. Truth | Lie |
| 13. Truth | Lie |
| 14. Truth | Lie |
| 15. Truth | Lie |

Who do you think is the best deceiver, and why?

VITA

Karen Anding Fontenot was born in Shreveport, Louisiana, on July 30, 1953, the daughter of Sam and Pat Anding. She was educated in schools in California, Mississippi, Libya, Turkey, and Texas. She received her B.A. degree with a major in journalism from Louisiana State University, Baton Rouge, Louisiana, in 1975 and her M.A. degree, also in journalism, from LSU in 1978.

Married to Dr. Michael J. Fontenot, she has one son, John, and one stepson, Joel. She is an assistant professor in the Department of Communication and Theatre at Southeastern Louisiana University, Hammond, Louisiana. She received her Ph.D. in speech communication from LSU in **December 1993**.

DOCTORAL EXAMINATION AND DISSERTATION REPORT

Candidate: Karen Anding Fontenot

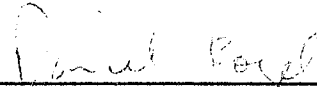
Major Field: Speech Communication

Title of Dissertation: The Relationship of Conversational Sensitivity
and Employment Interview Experience to Deception
Detection in Employment Interviews

Approved:



Major Professor and Chairman



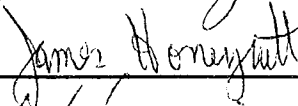
Dean of the Graduate School

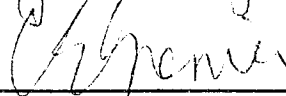
EXAMINING COMMITTEE:











Date of Examination:

